

#### Specifications

Power Requirements: 85W, 100, 110, 117, 125, 220 & 240

volts (Voltage selector provided in the set) AC 50 or 60 Hz (Convertible with power

frequency selector)

Tape Speeds: 71/2 ips, 31/4 ips and 17/5 ips

(19 cm/s; 9.5 cm/s and 4.8 cm/s)

Reel Size: 7" (18 cm) or smaller

Recording System: 4-track stereophonic or monophonic

Frequency Response: 30~22,000 Hz at 71/2 ips (19 cm/s)

30~13,000 Hz at 3¾ ips (9.5 cm/s)

30~10,000 Hz at 374 ips (3.5 cm/s)

Flutter and Wow: Less than 0.09% at 71/2 ips (19 cm/s)

Less than 0.12% at 3¼ ips (9.5 cm/s) Less than 0.16% at 175 ips (4.8 cm/s)

Power Output: 15W (maximum) per channel

40W (dynamic power) with both channels

Signal-to-Noise Ratio: Better than 50 dB

Harmonic Distortion: Less than 1.2% (at normal recording level)

Less than 0.5% (in working as an Amplifier)

Recording Level

Indication: Two VU meters

Tone Controls: Two separate controls for bass and treble

Inputs: Low impedance microphone inputs:

-72 dBs (0.2 mV)

High impedance auxiliary inputs:

-22 dBs (0.06 V)

High impedance tuner inputs:

-22 dBs (0.06 V)

Phonograph inputs: -52 dBs (0.2 V)

Outputs: Line outputs: 0 dBs (0.775 V),

Load impedance 100KΩ

Speaker outputs (for external):

Load impedance  $8\Omega$ Speaker outputs (for lid): Load impedance  $16\Omega$ 

Headphone outputs (for monitoring):

Load impedance  $8\Omega$ 

Headphone outputs (for listening):

Load impedance  $8\Omega$ 

Recording Time: 4-track stereo

(with 1,800 ft tape) 1.5 hrs at 71/2 ips (19 cm/s)

3 hrs at 3¾ ips (9.5 cm/s) 6 hrs at 1¾ ips (4.8 cm/s)

4-track monophonic

3 hrs at 7½ ips (19 cm/s) 6 hrs at 3¾ ips (9.5 cm/s) 12 hrs at 1½ ips (4.8 cm/s)

Semiconductors: Transistor: 40 pcs

Diode: 7 pcs

Heads: Record: RP30-2902

Playback: PP30-2902A Erase: EF18-2902A Dimensions: 17% (W) × 20 (H) × 11% (D)

(454×506×294 mm)

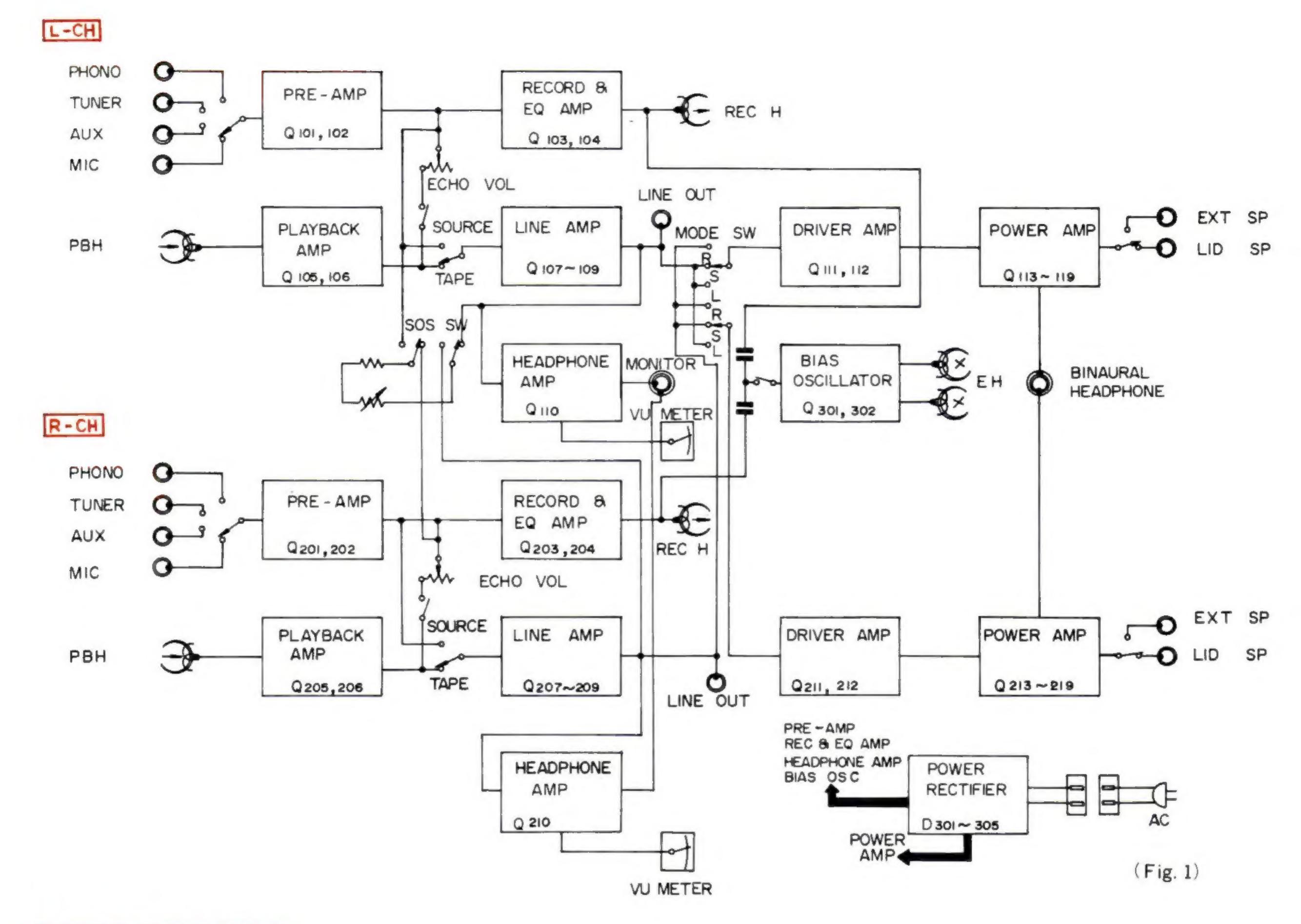
Weight: 41 lbs. (21 kgs.)



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#### Block Diagram



#### General Description

SONY Model TC-630 is a 3-head, 4-track, vertical/horizontal, stereo type tape recorder. This machine is capable of recording with echo effect as well as sound-on-sound. Its record level control system employs sliding controls and easy-to-see VU meters to insure greatly improved monitoring quality. In addition, a noise suppressor circuit which can best be used for playback of a tape recorded with much noise is successfully added for noiseless reproduction.

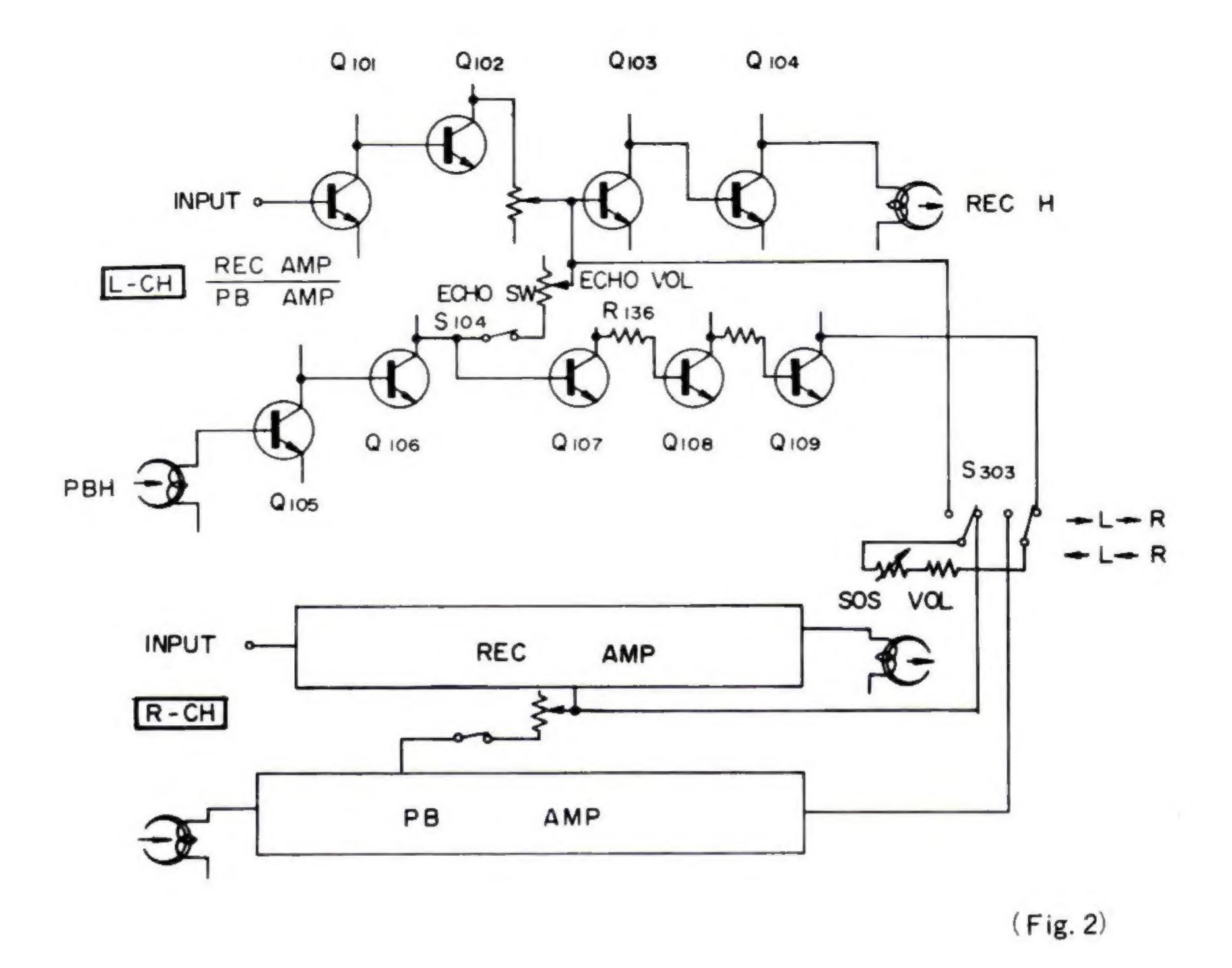
#### Technical Features

#### 1. Sound-On-Sound

By "sound-on-sound" is meant by one of recording modes in which an external signal is mixed with the signal reproduced from one channel of the tape and, at the same time, the "mix" of the two is recorded onto the other channel of the same tape. In TC-630, the recording of sound-on-sound from left channel to right channel, and vice versa, is quite practicable. Moreover, the previously recorded signal is left unerased, making it possible to repeat the recording of such a sound-on-sound.

#### 2. Echo-Effect Recording

Echo-effect recording is accomplished while the tape passes over the record head and reaches the playback head. The signal recorded on the tape by the record head is picked up by the playback head. It is then amplified by the playback amplifier (including  $Q_{105}$  and  $Q_{106}$ ) and the record amplifier (including  $Q_{103}$  and  $Q_{104}$ ), and is recorded on the same tape again, thereby bringing about echo effect.



#### 3. Power Output Stage

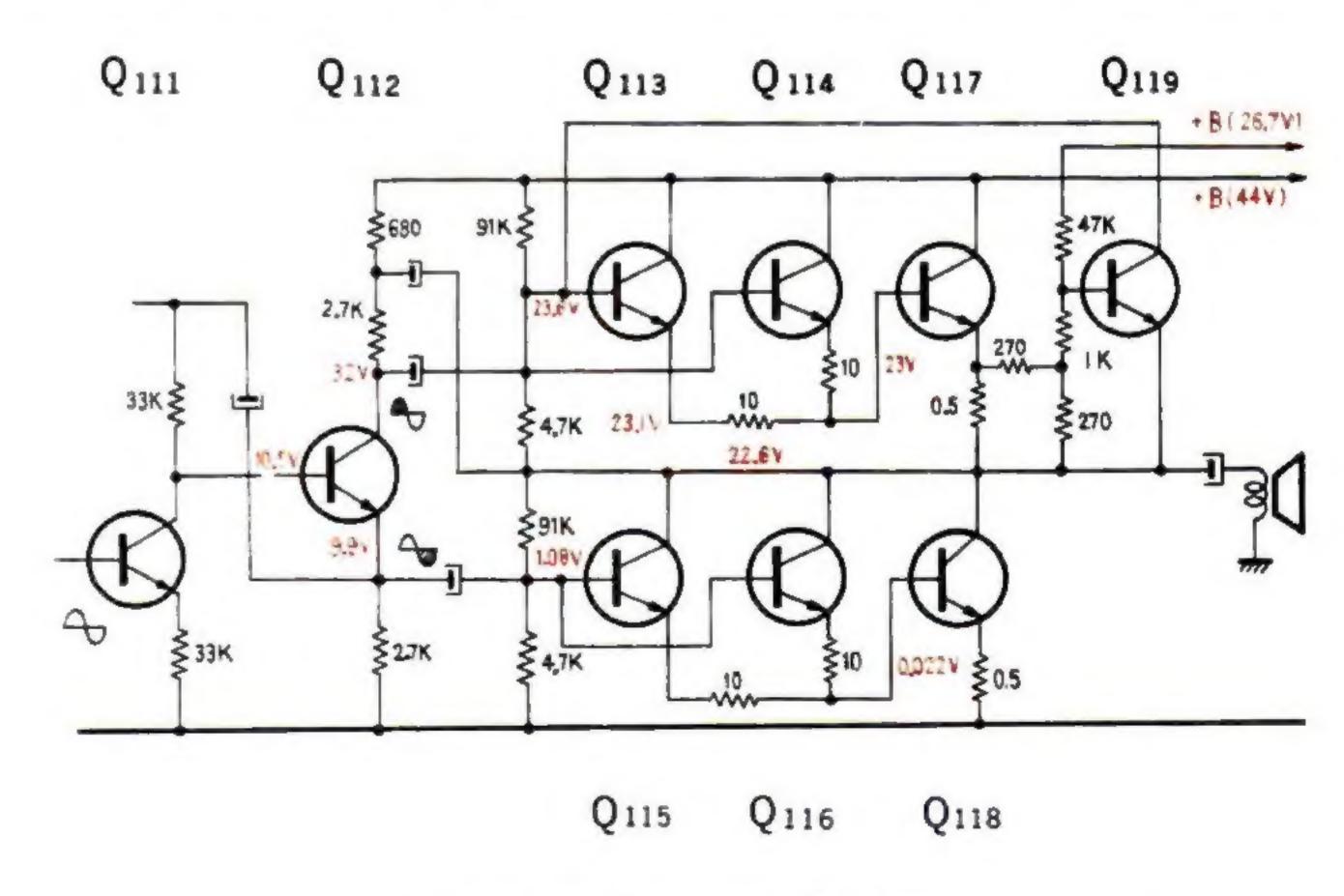
An SEPP (single ended push pull) circuit is used in this power output stage. In this circuit, the output of transistor can be directly coupled to the voice coil of the speaker. It can rightly be said, therefore, that this circuit has an advantage over any circuit using an output transformer from the standpoint of frequency characteristic and distortion.

Referring to the accompanying circuit diagram, the transistor  $Q_{111}$  acts as a driver amplifier and the transistor  $Q_{112}$  as a phase inverter. The positive half of the signal applied to the base of the latter transistor appears on the collector and the negative half on the emitter of the transistor. The signal appearing on the collector drives the Darlington circuit (including  $Q_{113}$ ,  $Q_{114}$  and  $Q_{117}$ ), and the signal appearing on the emitter drives the Darlington circuit (including  $Q_{115}$ ,  $Q_{116}$  and  $Q_{118}$ ). At this time, the capacitor  $C_{316}$  discharges to supply voltage to be used as B+ bias to the latter Darlington circuit. The circuit including the transistor  $Q_{119}$  serves as a protective device, The transistor  $Q_{119}$  is cut off in normal states, but

in case where the load is short-circuited while the signal is applied to the transistor  $Q_{112}$ , the collector current of the transistor  $Q_{117}$  increases and the base voltage of the transistor  $Q_{119}$  steps up, the collector current of the transistor  $Q_{119}$  increases and the base voltage of the transistor  $Q_{119}$  increases and the base voltage of the transistor  $Q_{113}$  drops, the transistors  $Q_{113}$ ,  $Q_{114}$  and  $Q_{117}$  are cut off.

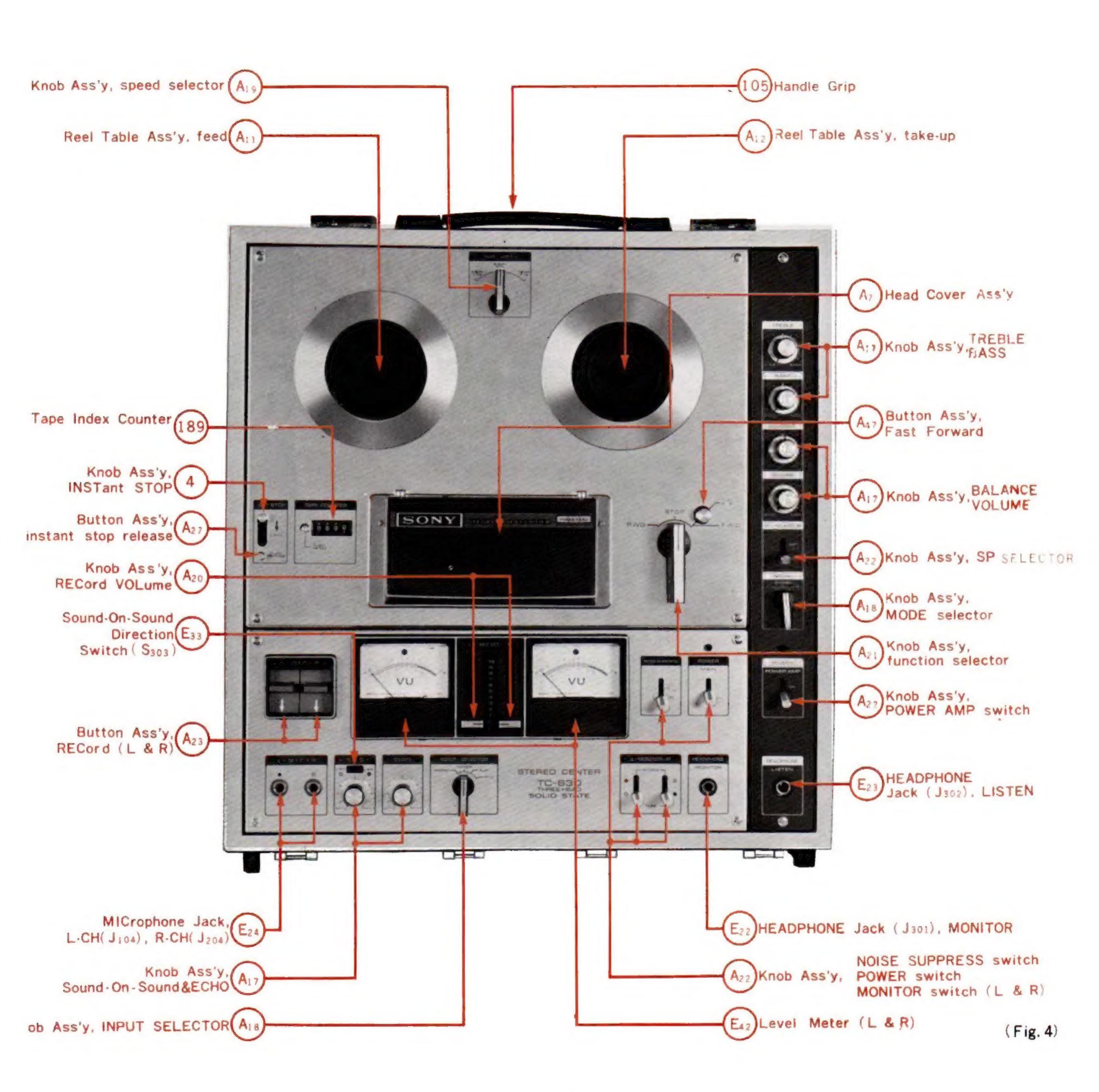
At the same time, the transistor  $Q_{118}$  is cut off by decreasing the collector current of the transistor  $Q_{117}$ .

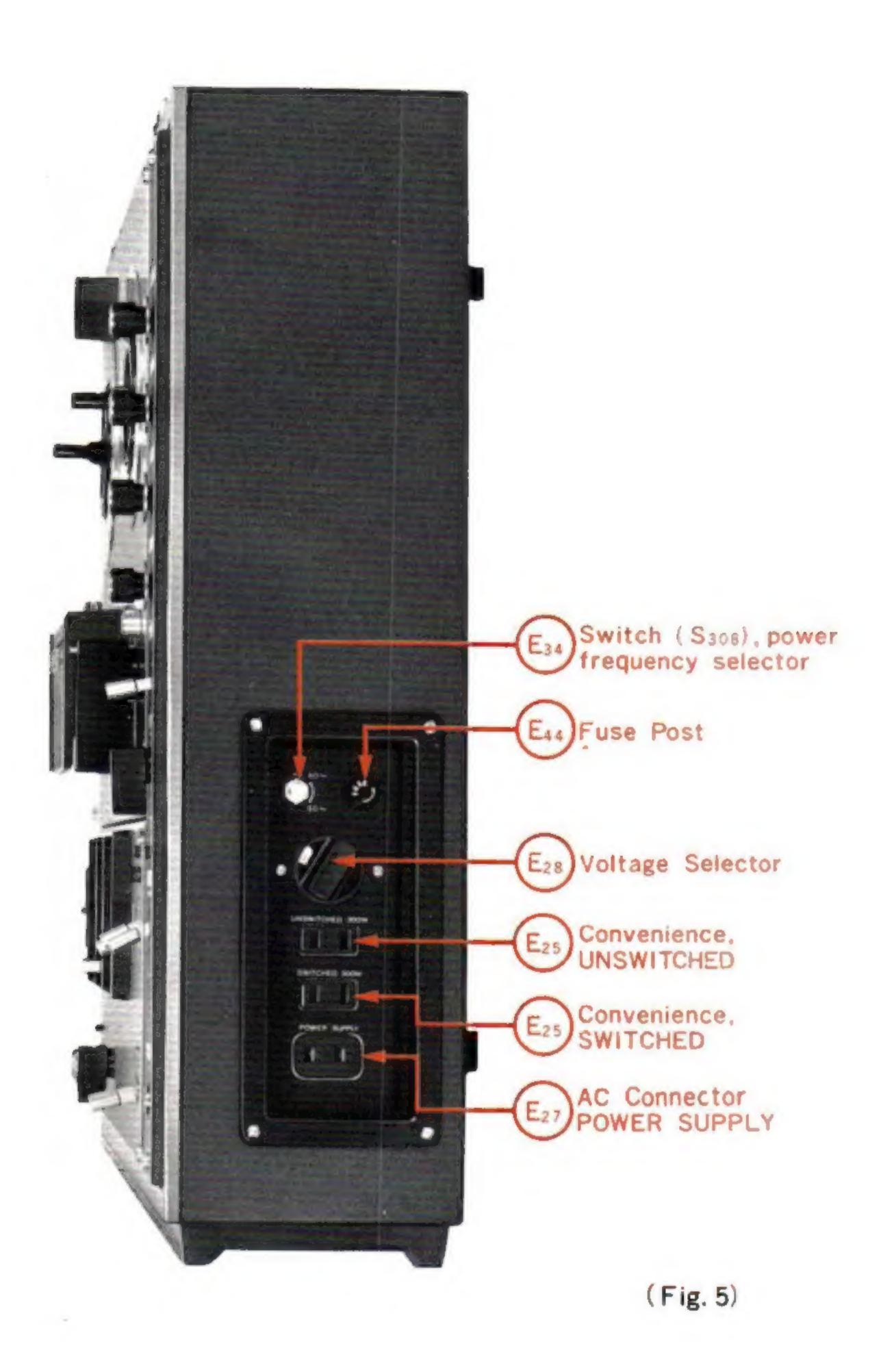
Therefore, the transistor Q<sub>119</sub> prevents the power transistors (Q<sub>117</sub> and Q<sub>118</sub>) from being damaged.

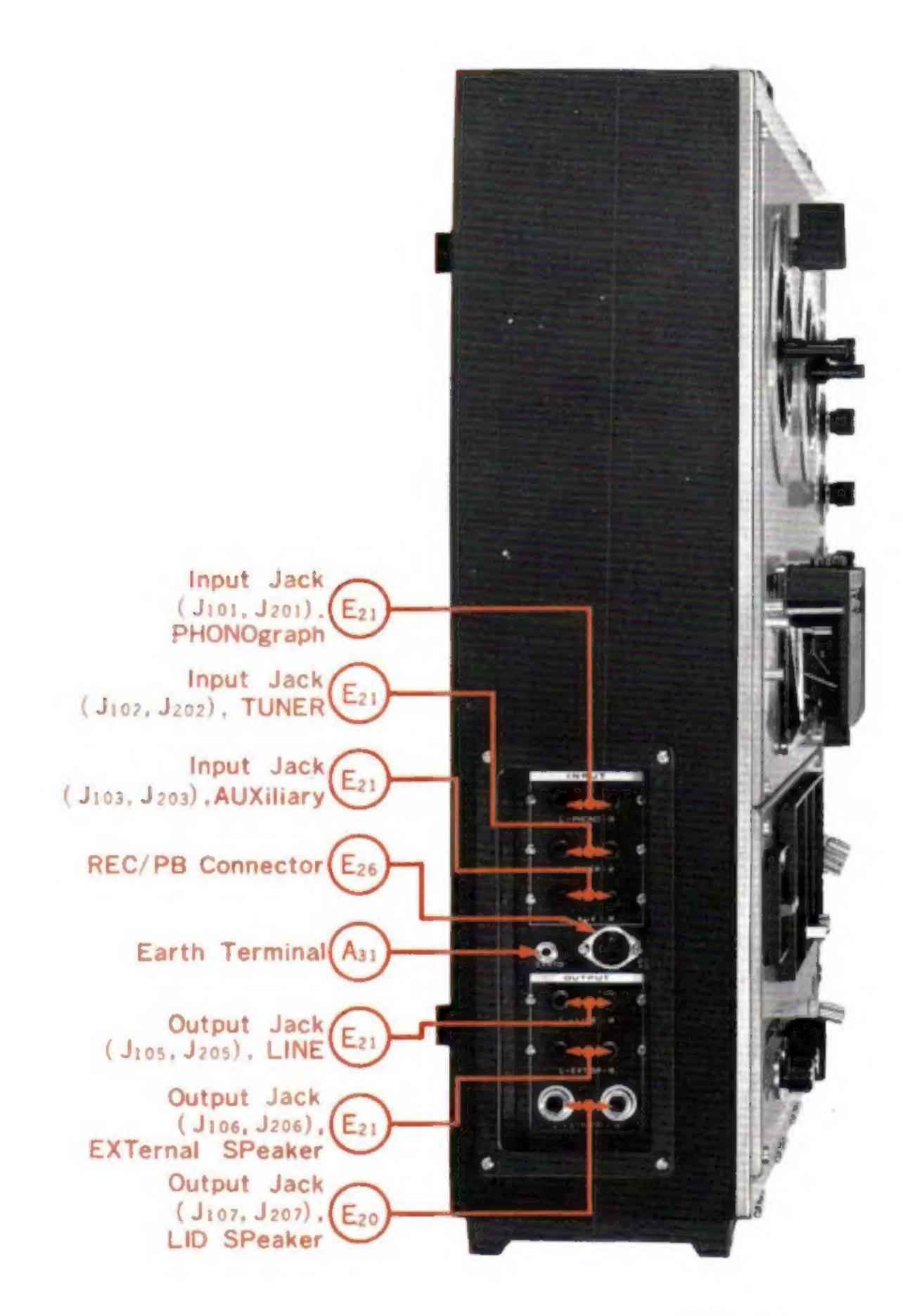


Power Output Stage

(Fig. 3)

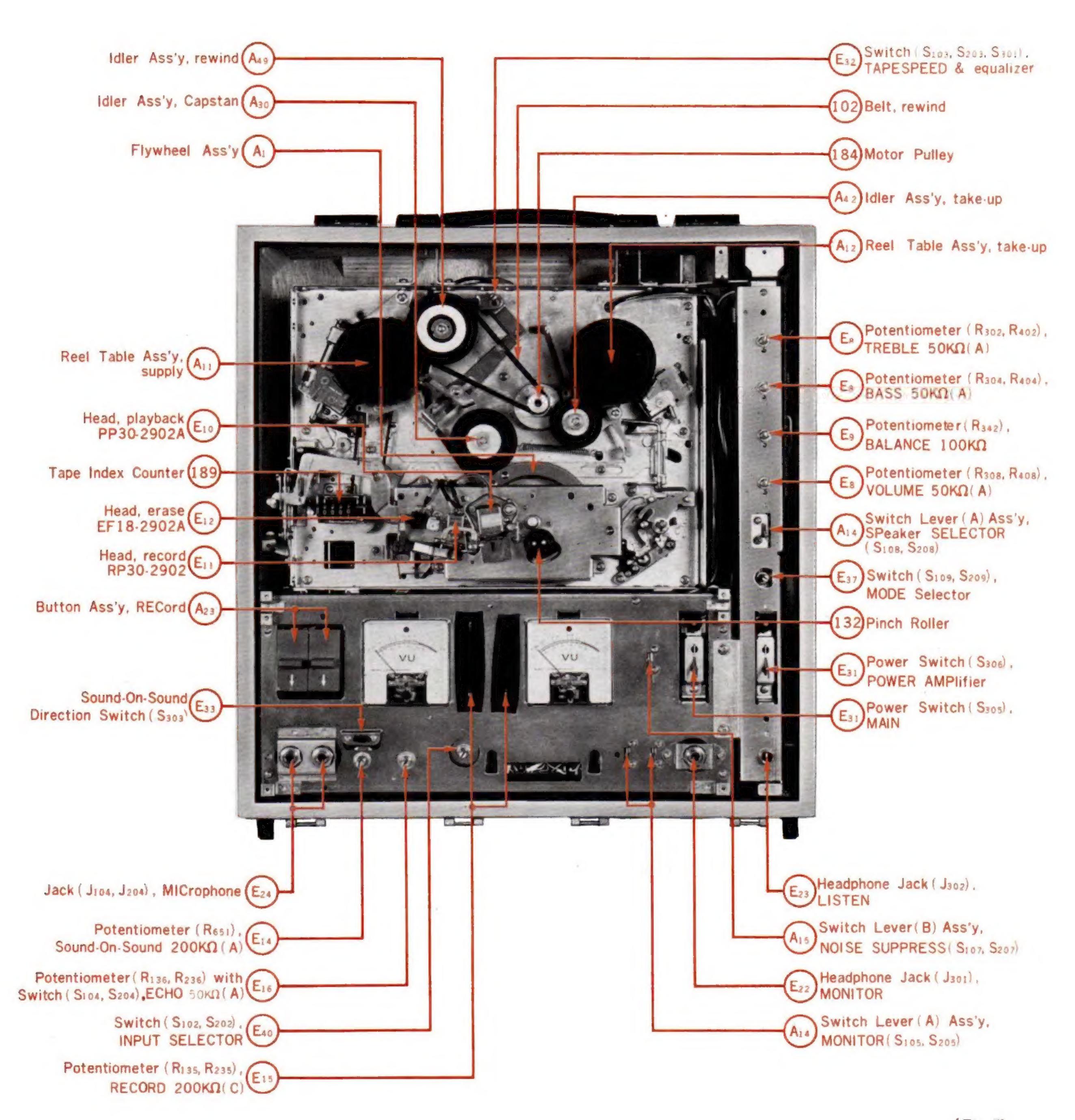






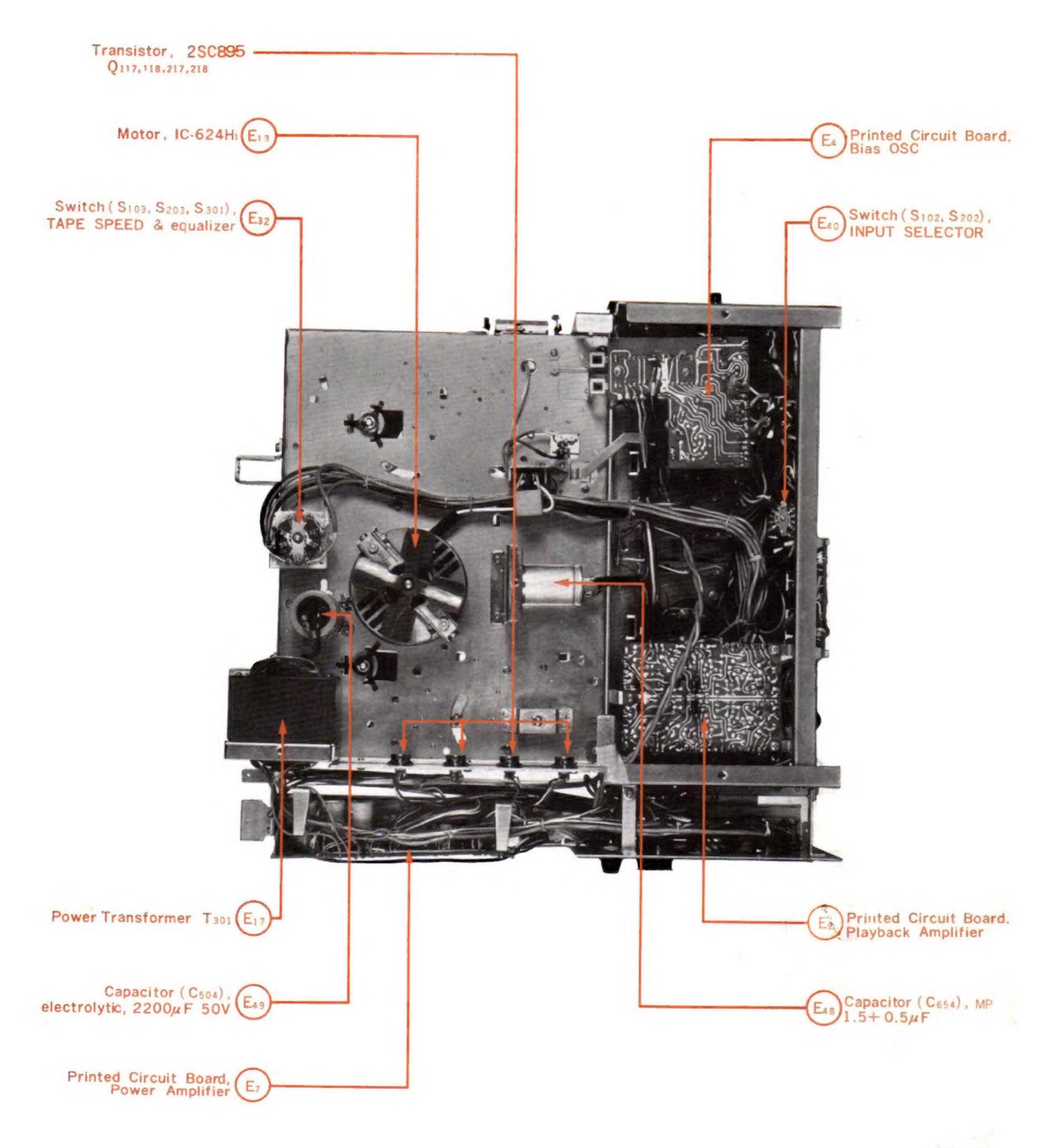
(Fig. 6)

#### Chassis Top View



(Fig. 7)

#### Chassis Bottom View



(Fig. 8)

# Removal of Knobs & Head Cover Removal of Reel Panel Screw@RF3x8 (39) Ornamental Screw 26) Ornamental Washer Head Cover Speed Selector Knob (A4) Reel Panel Function Selector Knob Inst. Stop Button (Fig. 10) Removal of Cabinet (Fig. 9) Removal of Handle Grip ⊕RF5×20 W5Ø Retainer 157 Handle Grip (Fig. 11)74) Ornamental Washer, Cabinet ⊕RF4×15

#### Preventive Maintenance

#### Lubrication

The following parts of the tape transport mechanism require lubrication after two thousand hours of operation or once a year, whichever occurs first. Lubrication is of importance to insure proper operation of the equipment.

#### 1. Motor

Motor requires 4 or 5 drops of SONY DPE Oil (light machine oil).

#### 2. Capstan

Capstan requires 2 or 3 drops of SONY Oil (light machine oil).

#### 3. Pinch Roller

Pinch Roller requires 2 or 3 drops of SONY Oil (light machine oil).

#### 4. Idler

Idlers require lubrication only if they become noisy. Use no more than one drop of SONY Oil (light machine oil). If the oil should spill on the rubber wheel or the belt, wipe it off immediately with alcohol.

#### Cleaning

The following parts must be cleaned with a lintless cloth moistened with alcohol (methyl) for optimum performance.

Capstan

Pinch Roller

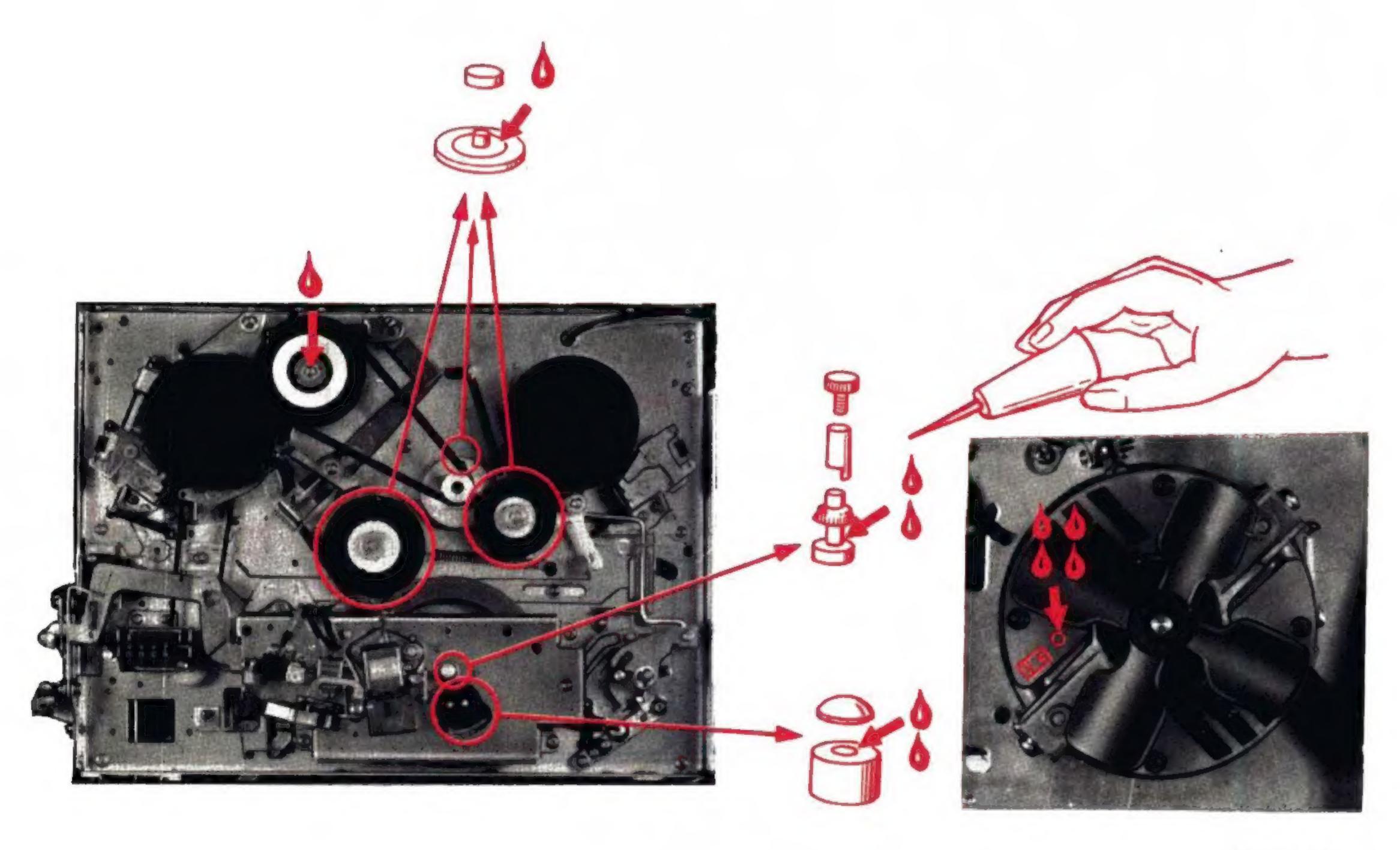
Flywheel

Idler

Tape Guides

Heads

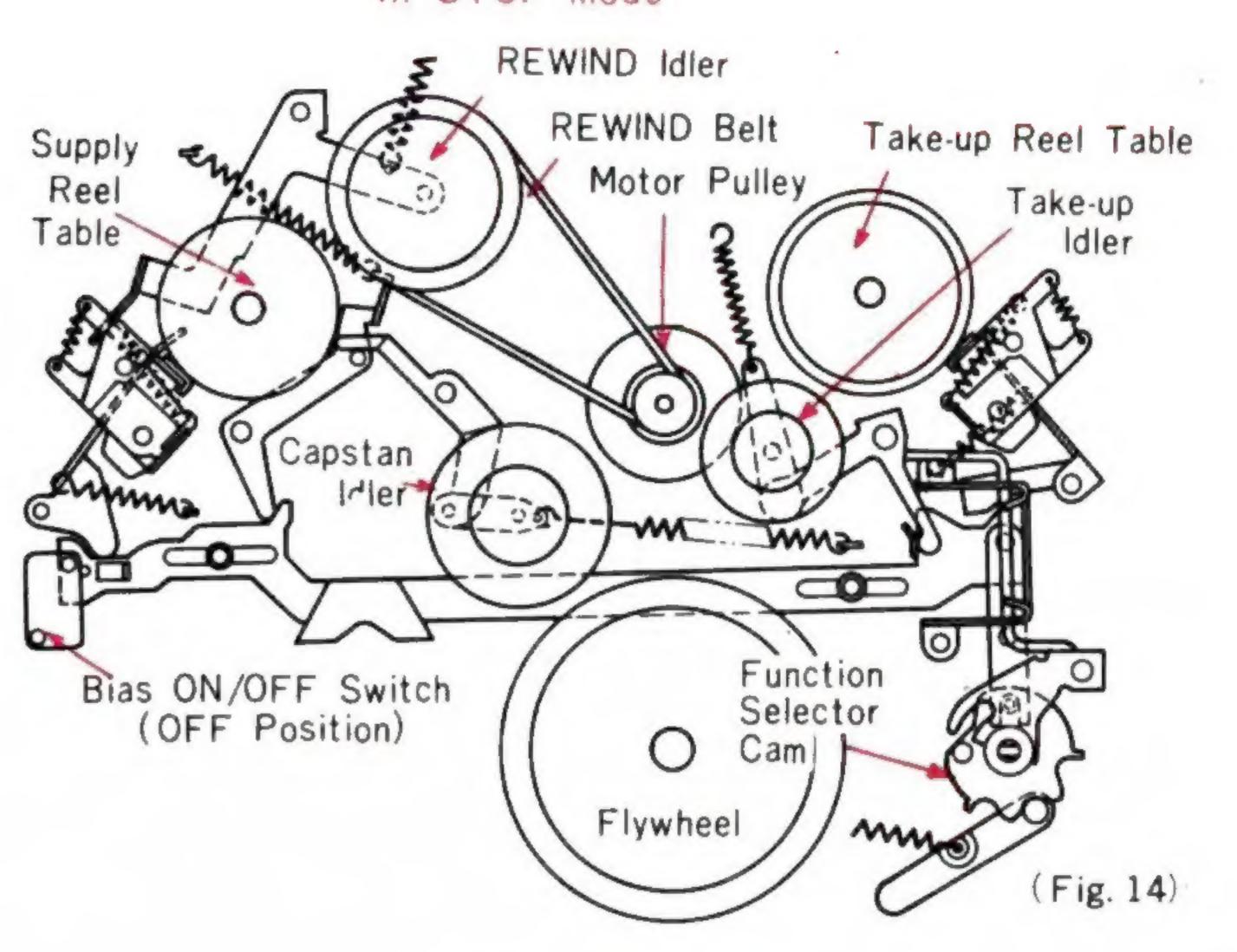
This cleaning is of importance for the tape threading path to prevent a loss of positive drive at capstan, drop outs, flutter and wow, or poor frequency response.



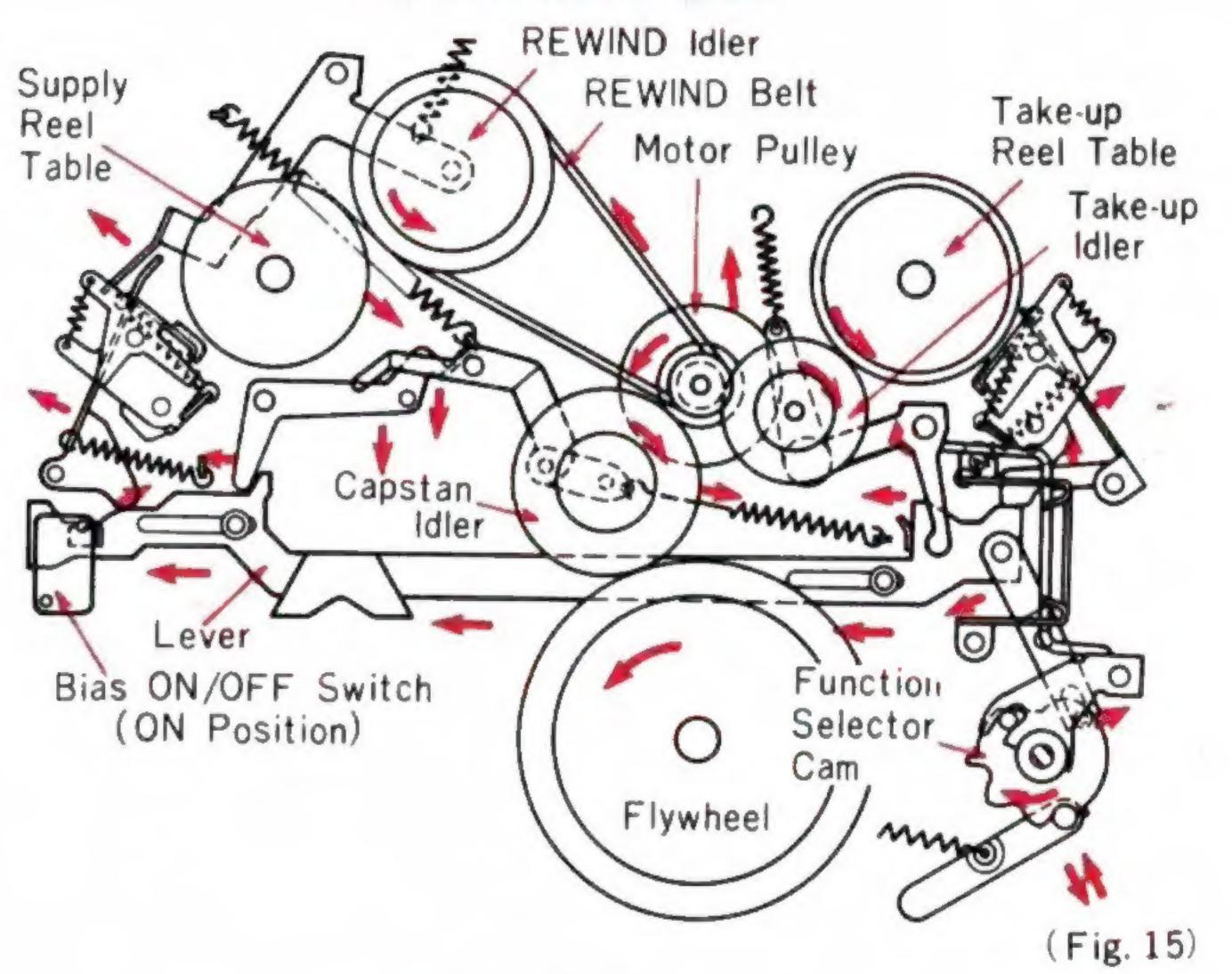
(Fig. 13)

#### Tape Transport Mechanism

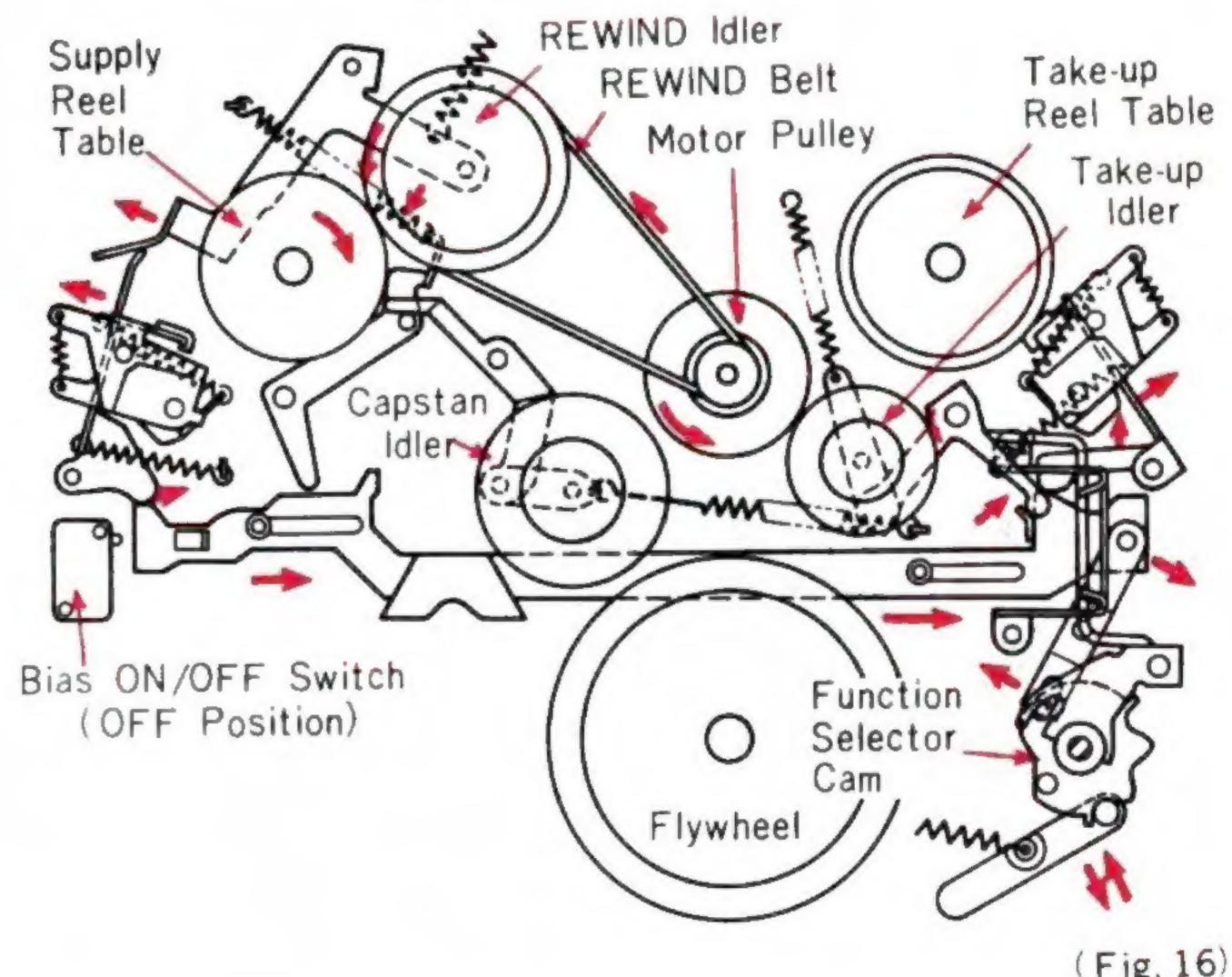
#### in STOP mode

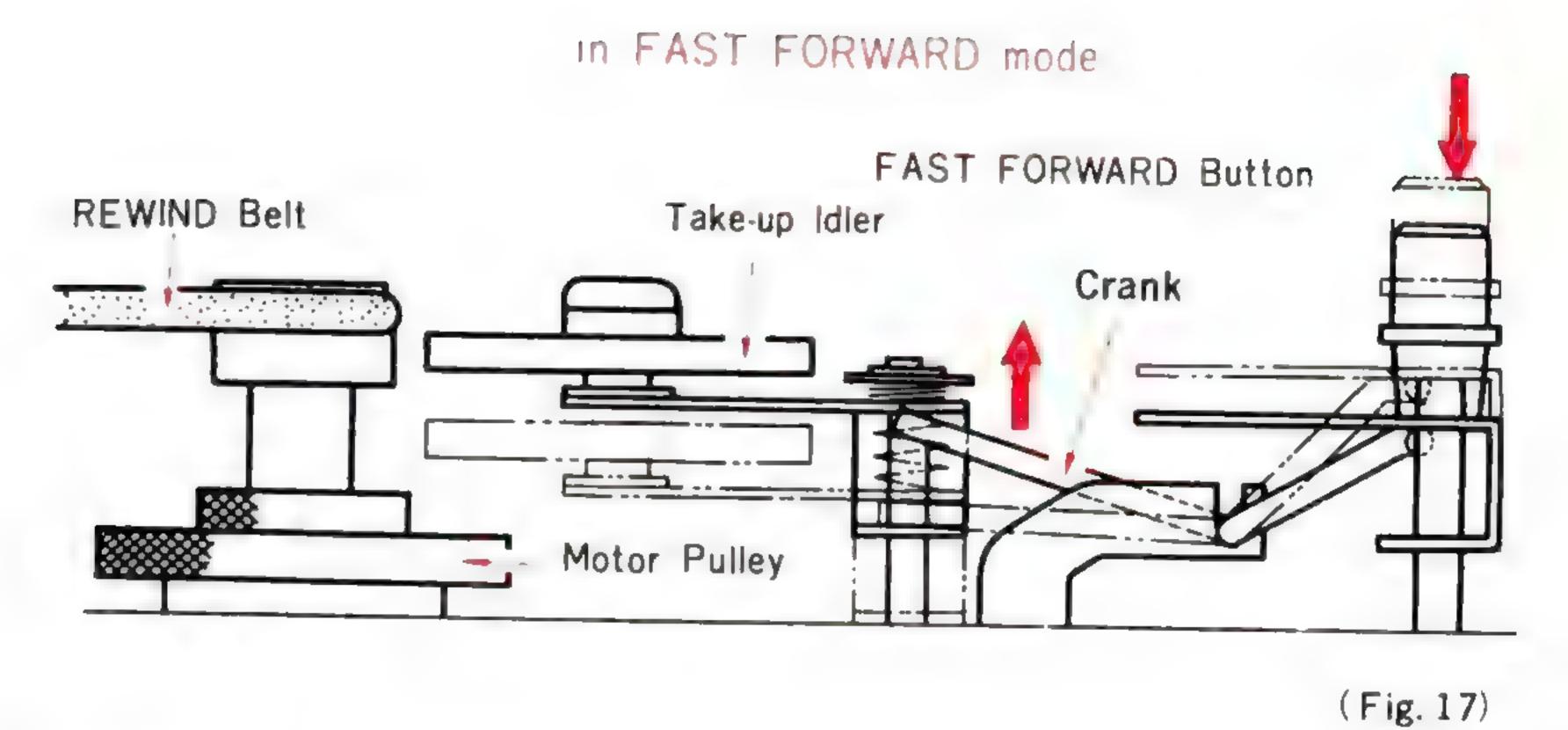


#### in FORWARD mode

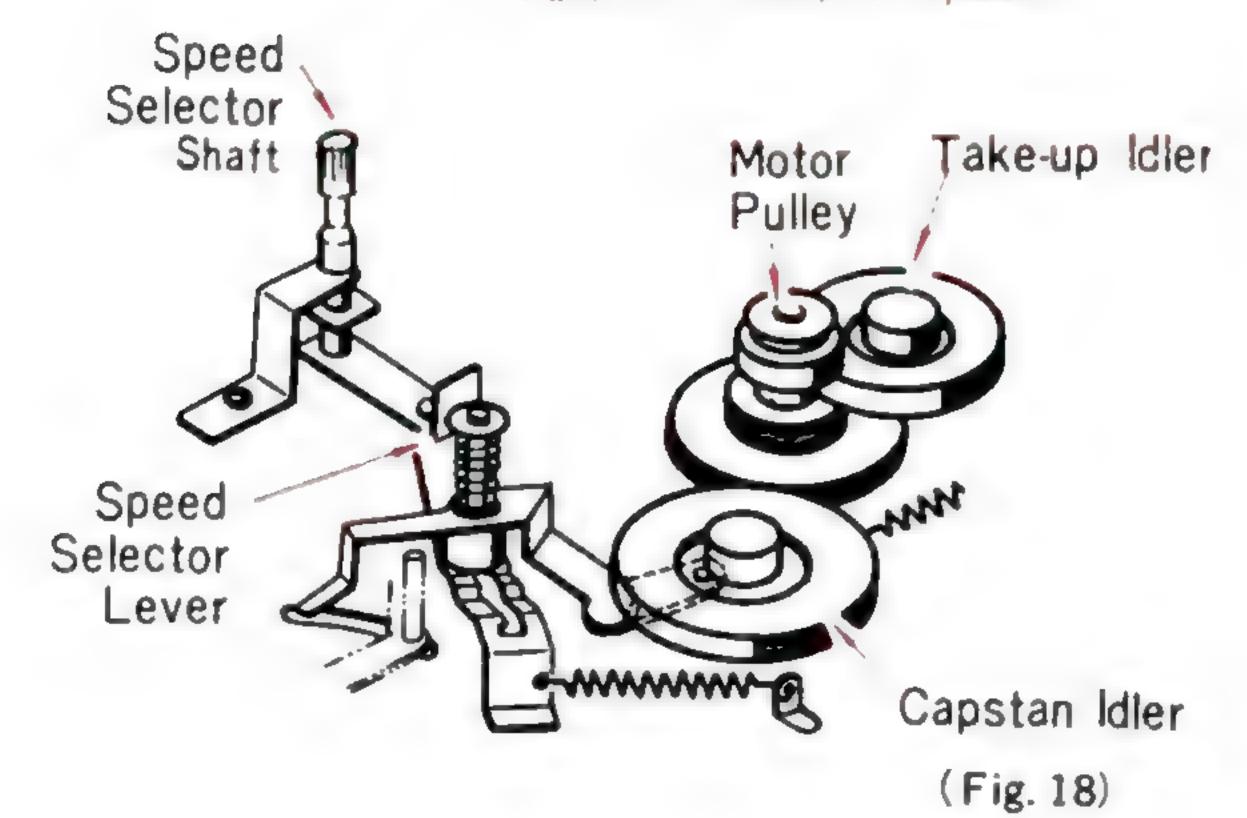


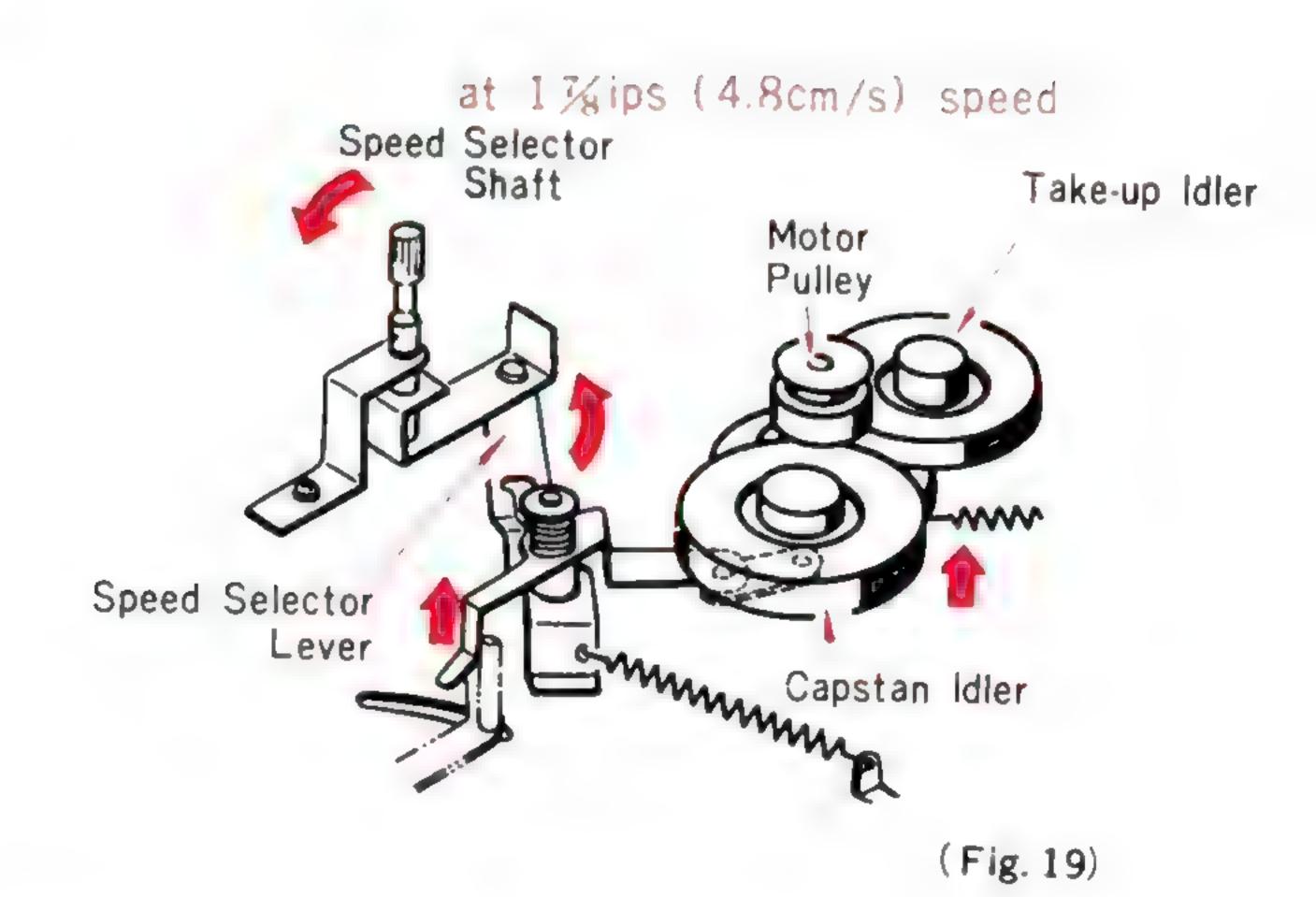
#### in REWIND mode



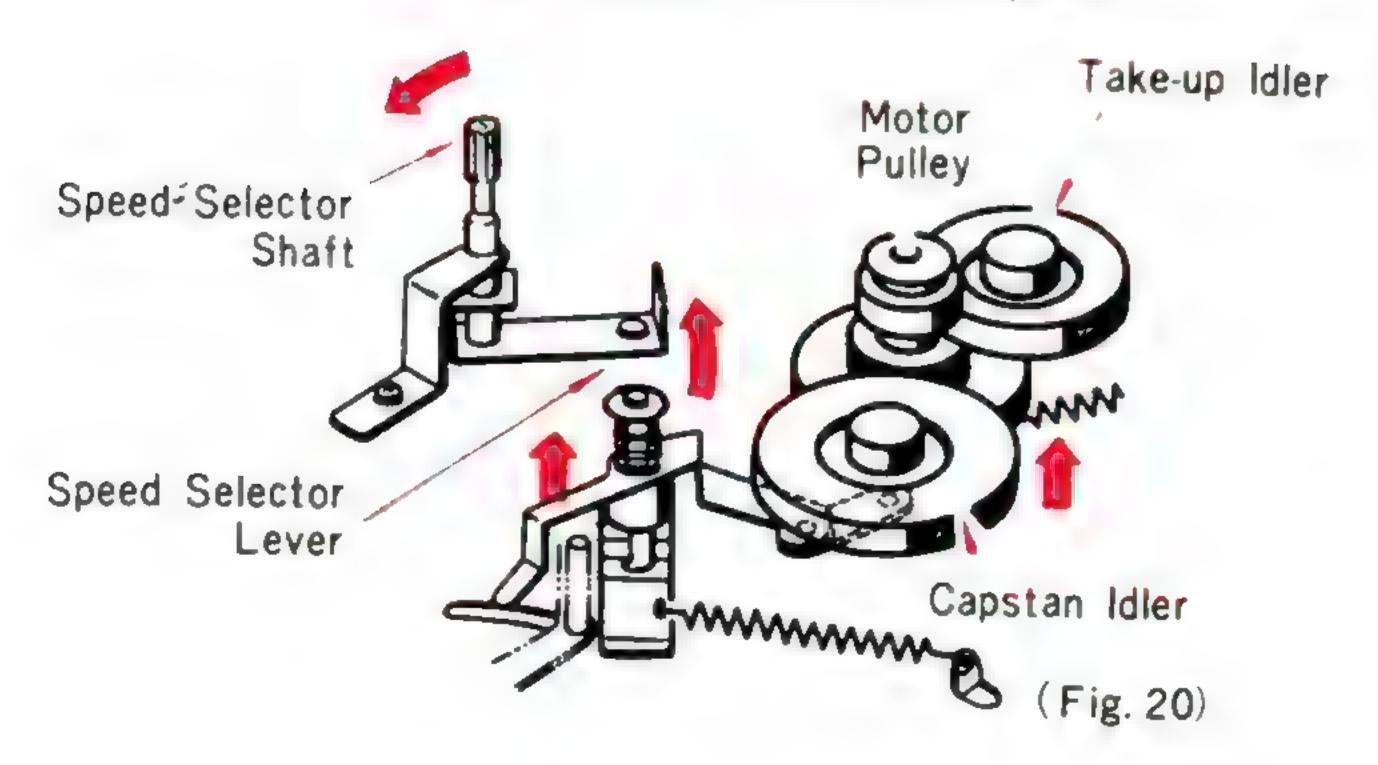


at 7½ ips (19cm/s) speed





at 33/ips(9.5cm/s) speed

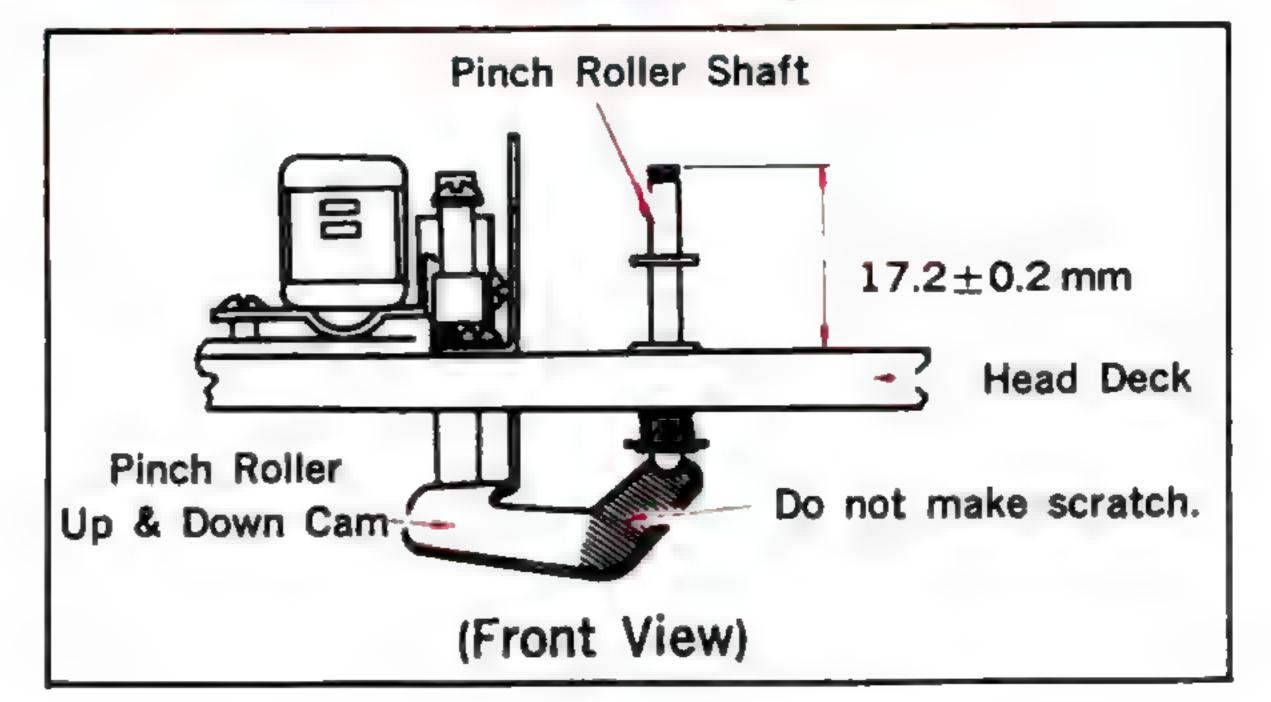




(Fig. 21)

# A

#### Pinch Roller Shaft Height Adjustment



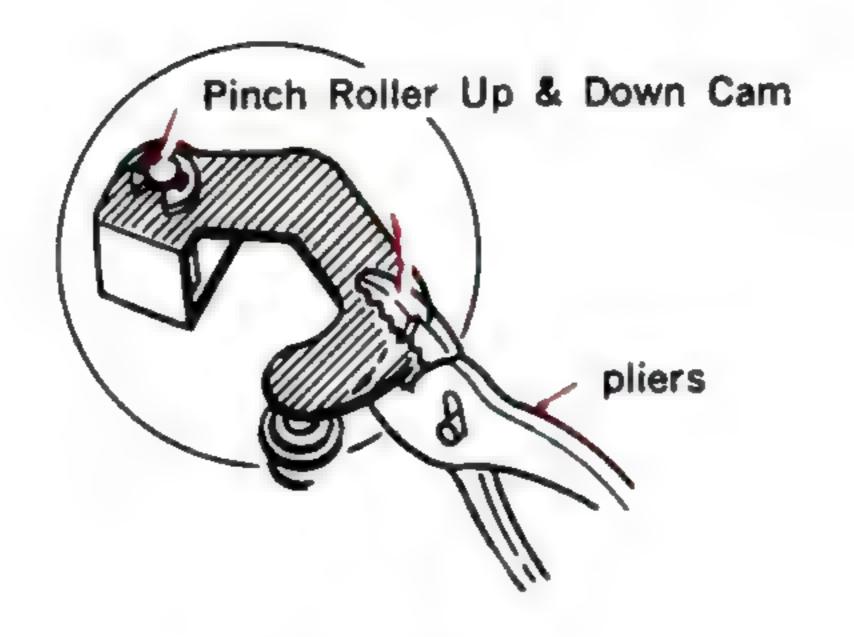
#### 1. When adjusting roughly

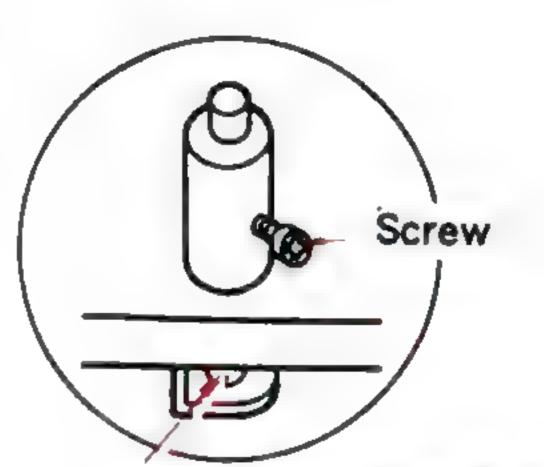
Adjust by bending with pliers moving up or down as shown below.

#### 2. When adjusting accurately

Adjust to obtain 17.2±0.2 mm by loosening Screw and moving Shaft up or down.

After fastening Screw, apply Lock Paint.





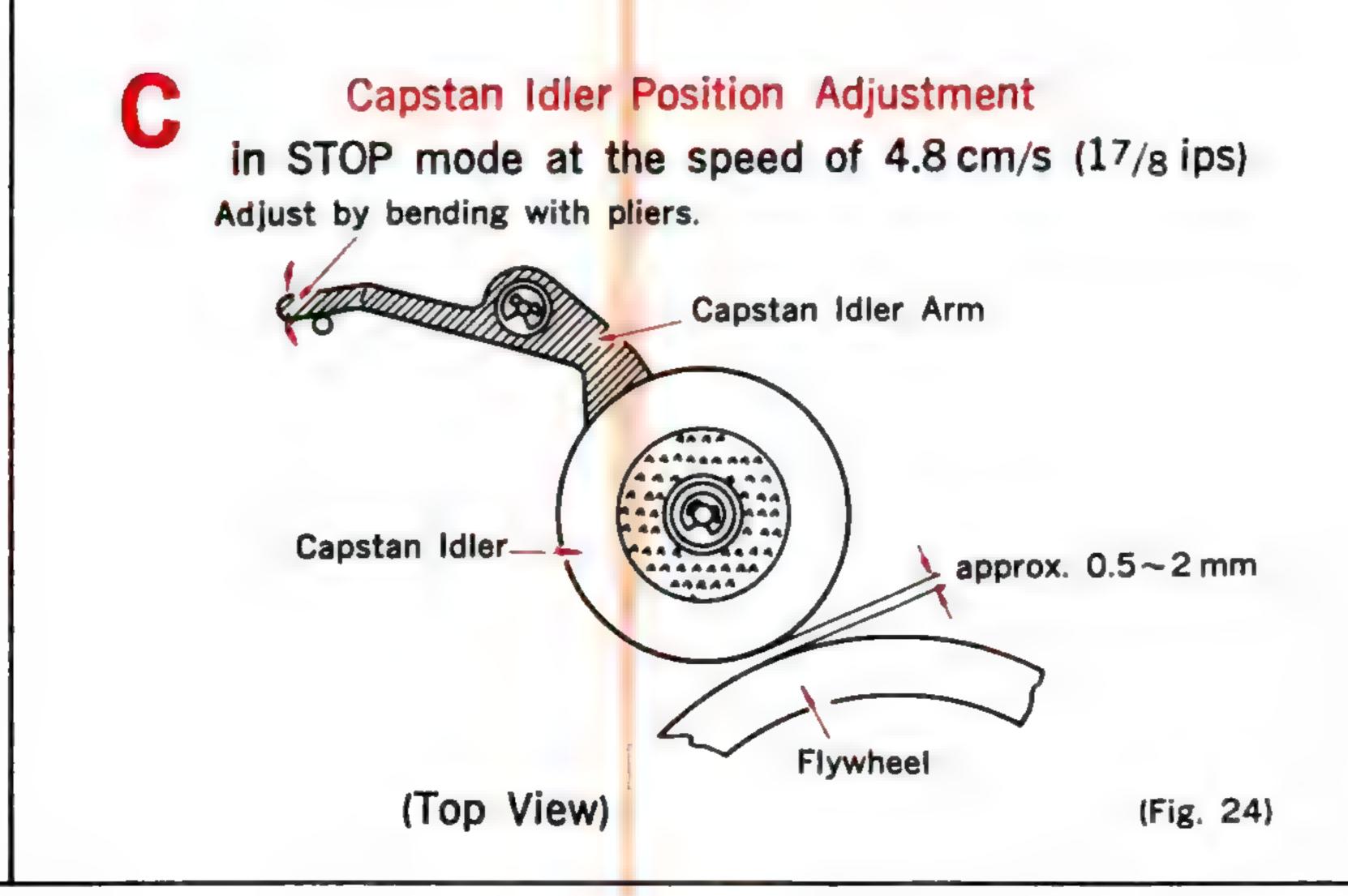
Pinch Roller Up & Down Cam

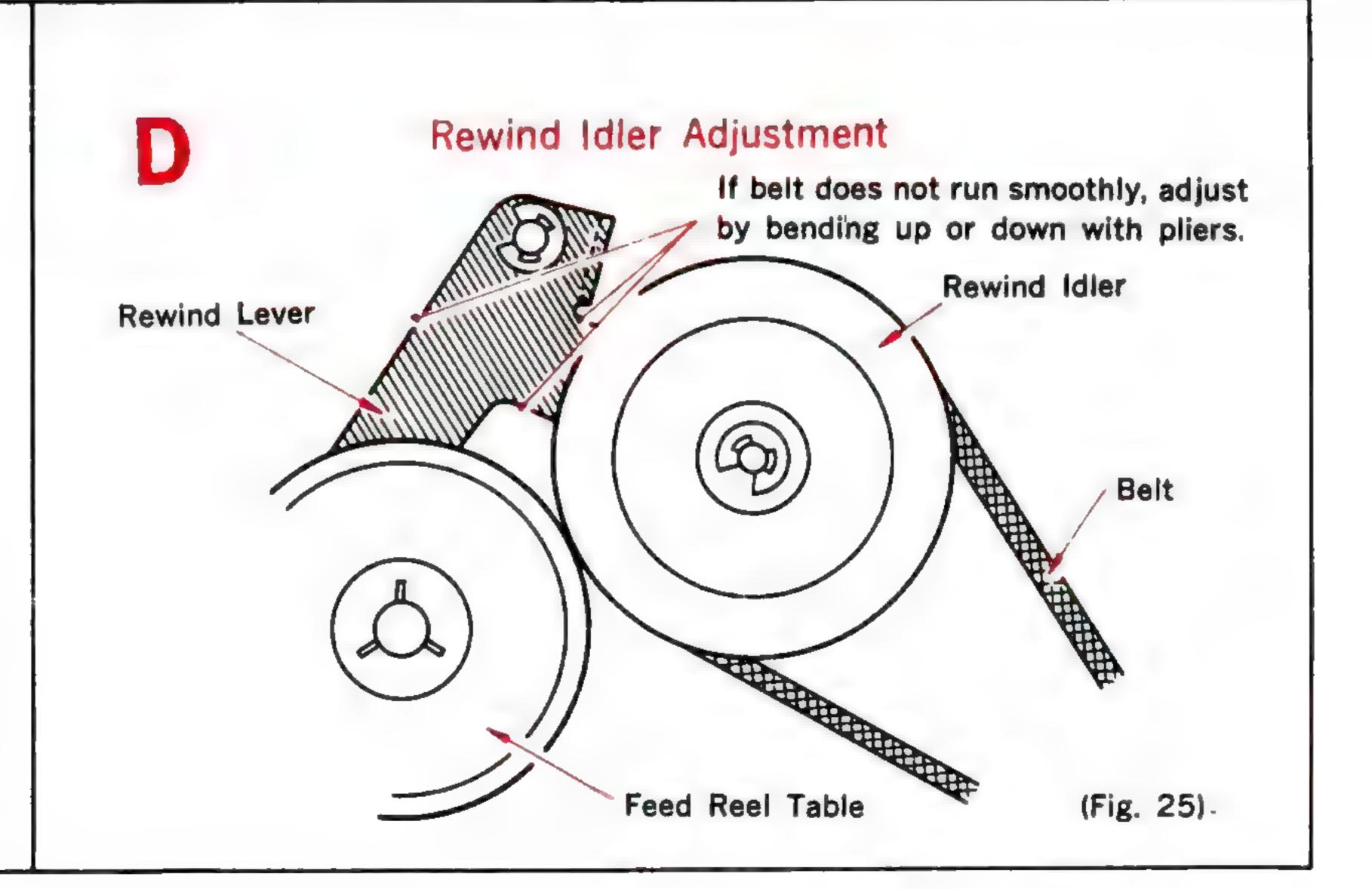
(Bottom View)

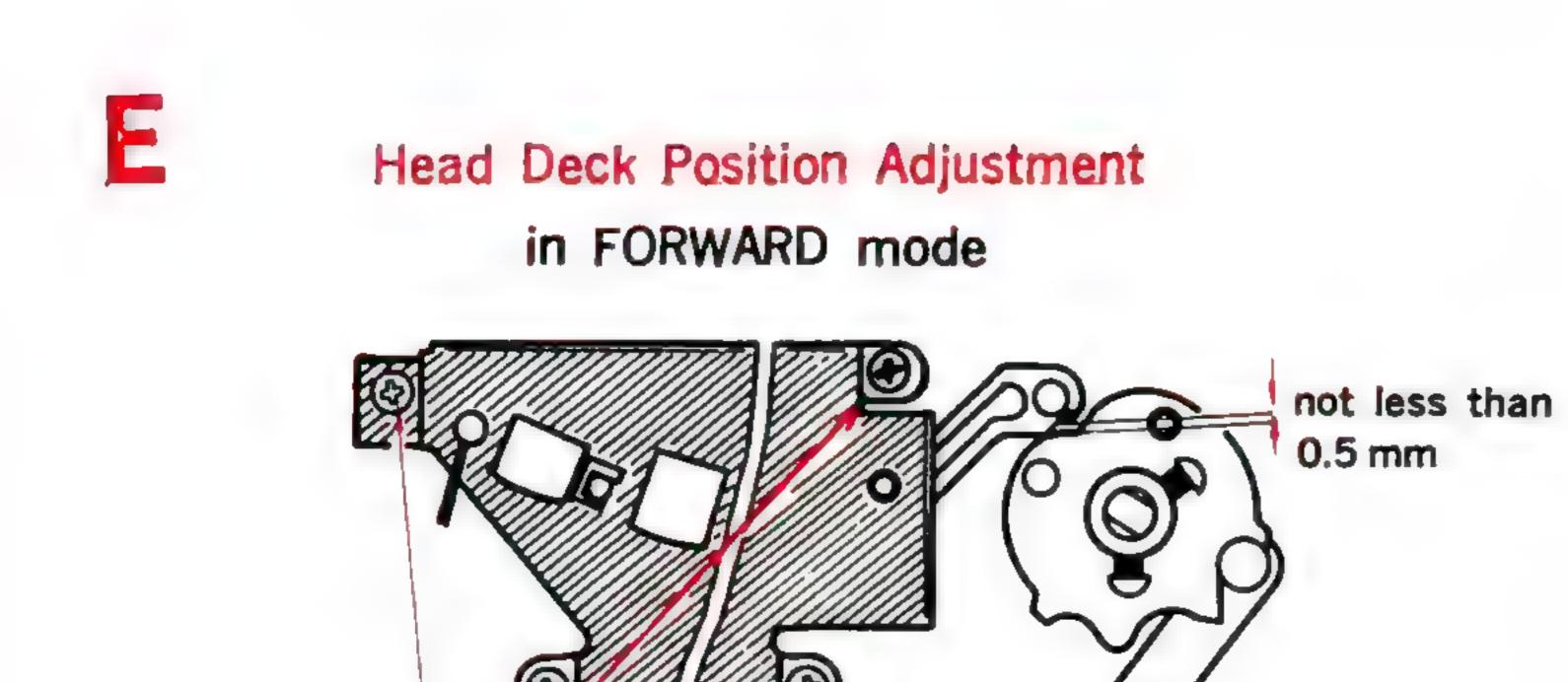
(Top View)

(Fig. 22)

# in FAST FORWARD mode 0.2~0.4 mm Adjust by bending up or down with pliers. (Side View) (Fig. 23)



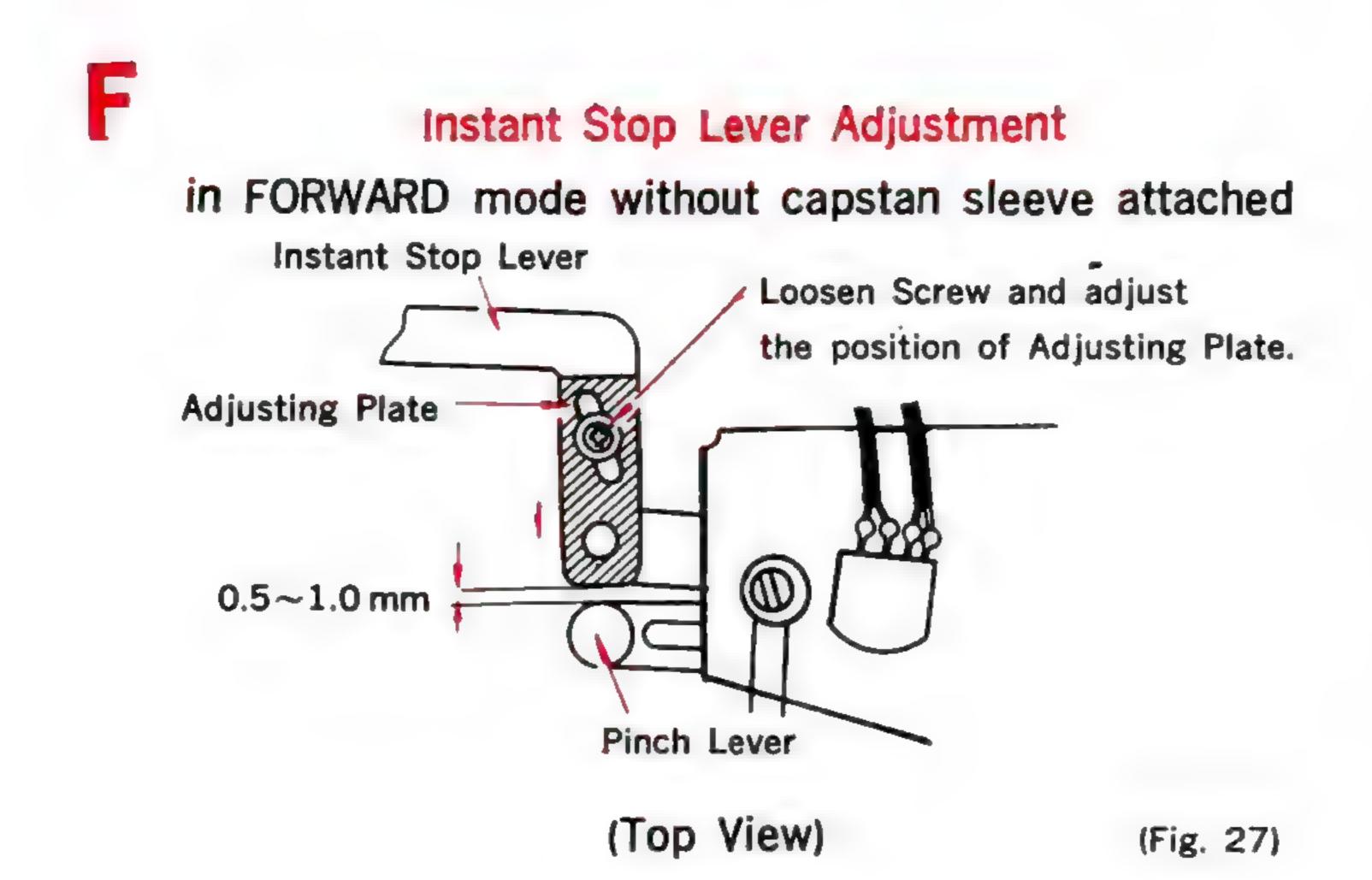




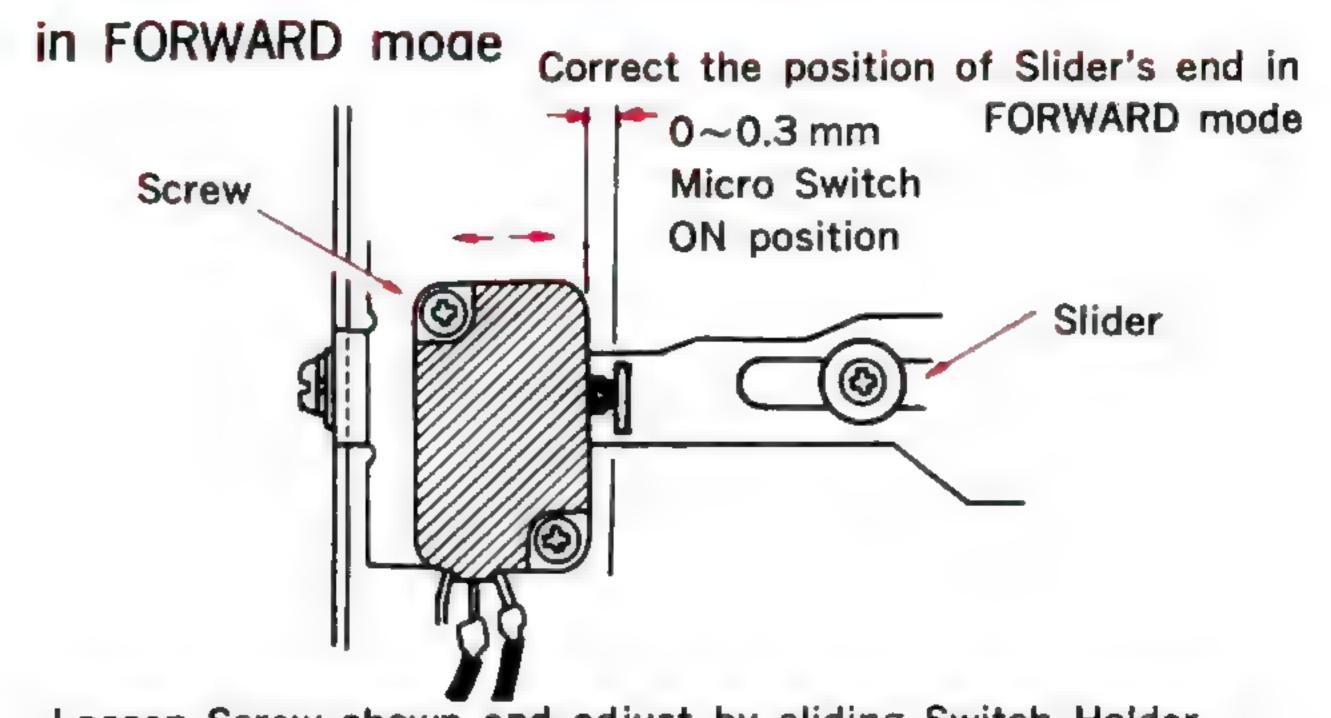
Loosen Screws and adjust the position of Head Deck.

(Top View)

(Fig. 26)







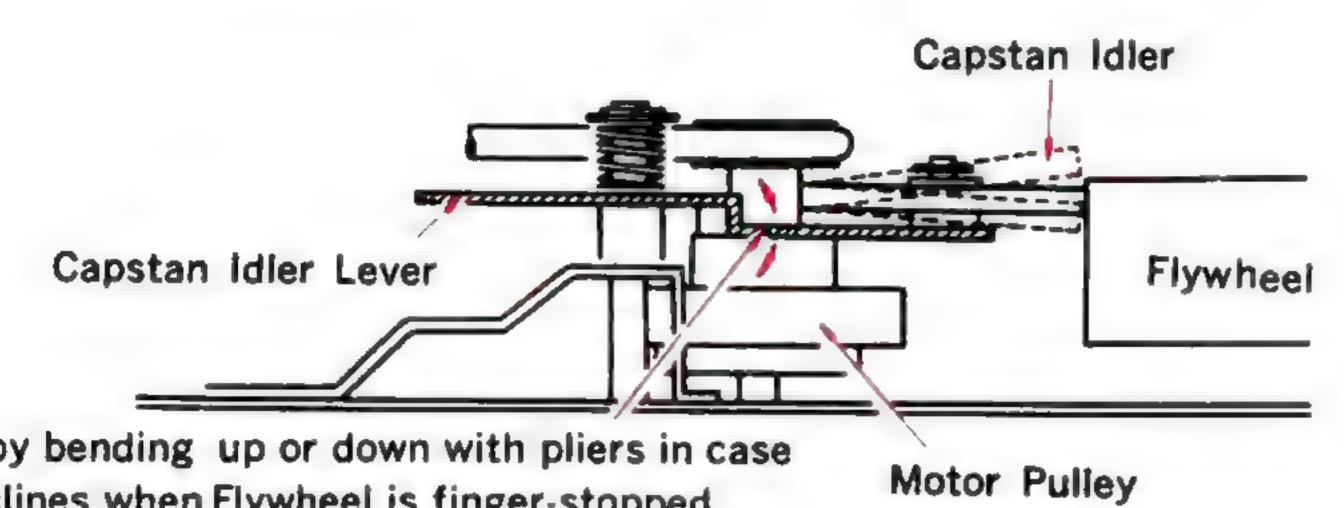
Loosen Screw shown and adjust by sliding Switch Holder.

(Top View)

(Fig. 28)

#### Capstan Idler Slip Check

in FORWARD mode at the speed of 4.8 cm/s (17/8 ips)



Adjust by bending up or down with pliers in case Idler inclines when Flywheel is finger-stopped.

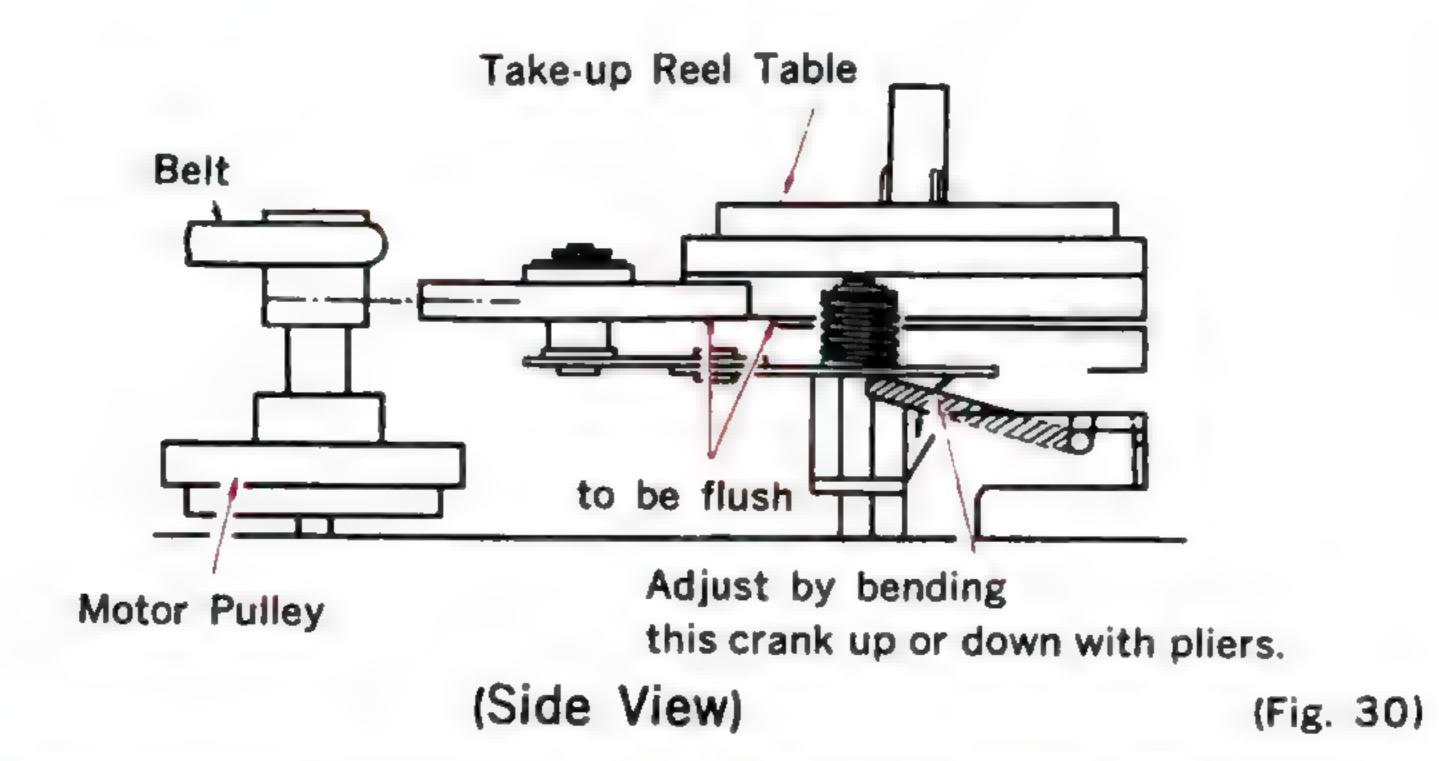
If Idler slips, clean the surface of Idler with alcohol.

(Side View)

(Fig. 29)

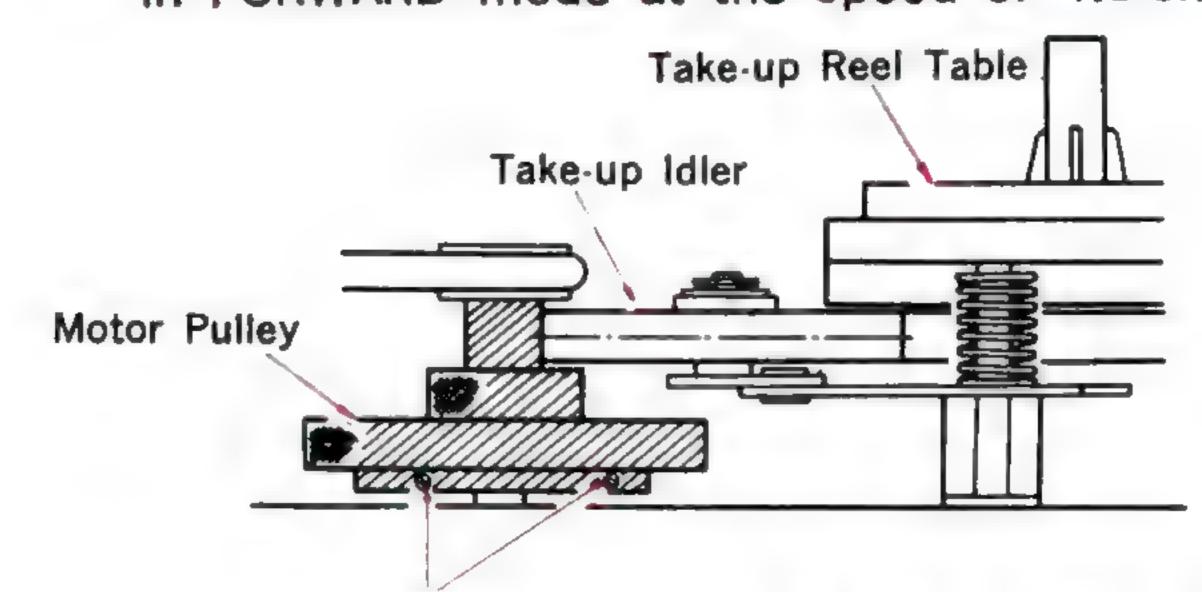
Take-up Idler Height Adjustment

in FAST FORWARD mode



Take-up Idler Position Adjustment

in FORWARD mode at the speed of 4.8 cm/s (17/8 ips)



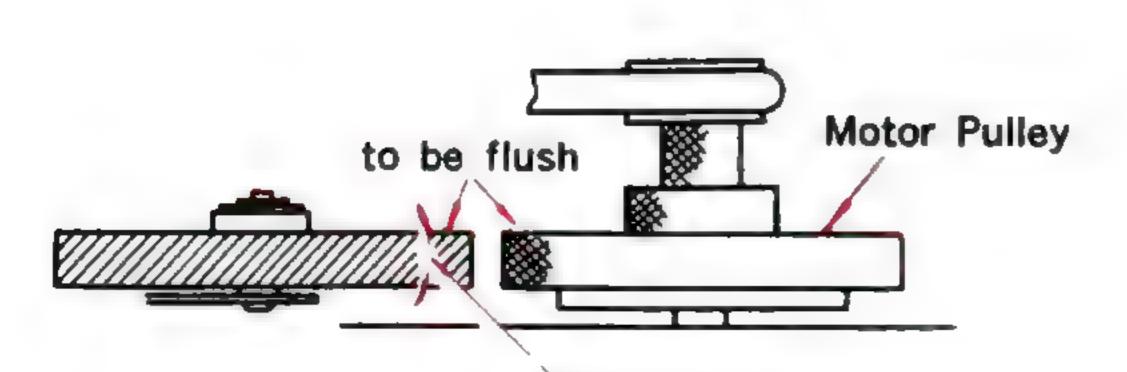
Loosen Screws and adjust the height of Motor Pulley so that take-up idler makes contact with the pulley as shown.

(Side View)

(Fig. 31)

#### Capstan Idler Position

in STOP mode at the speed of 19 cm/s (71/2 ips)

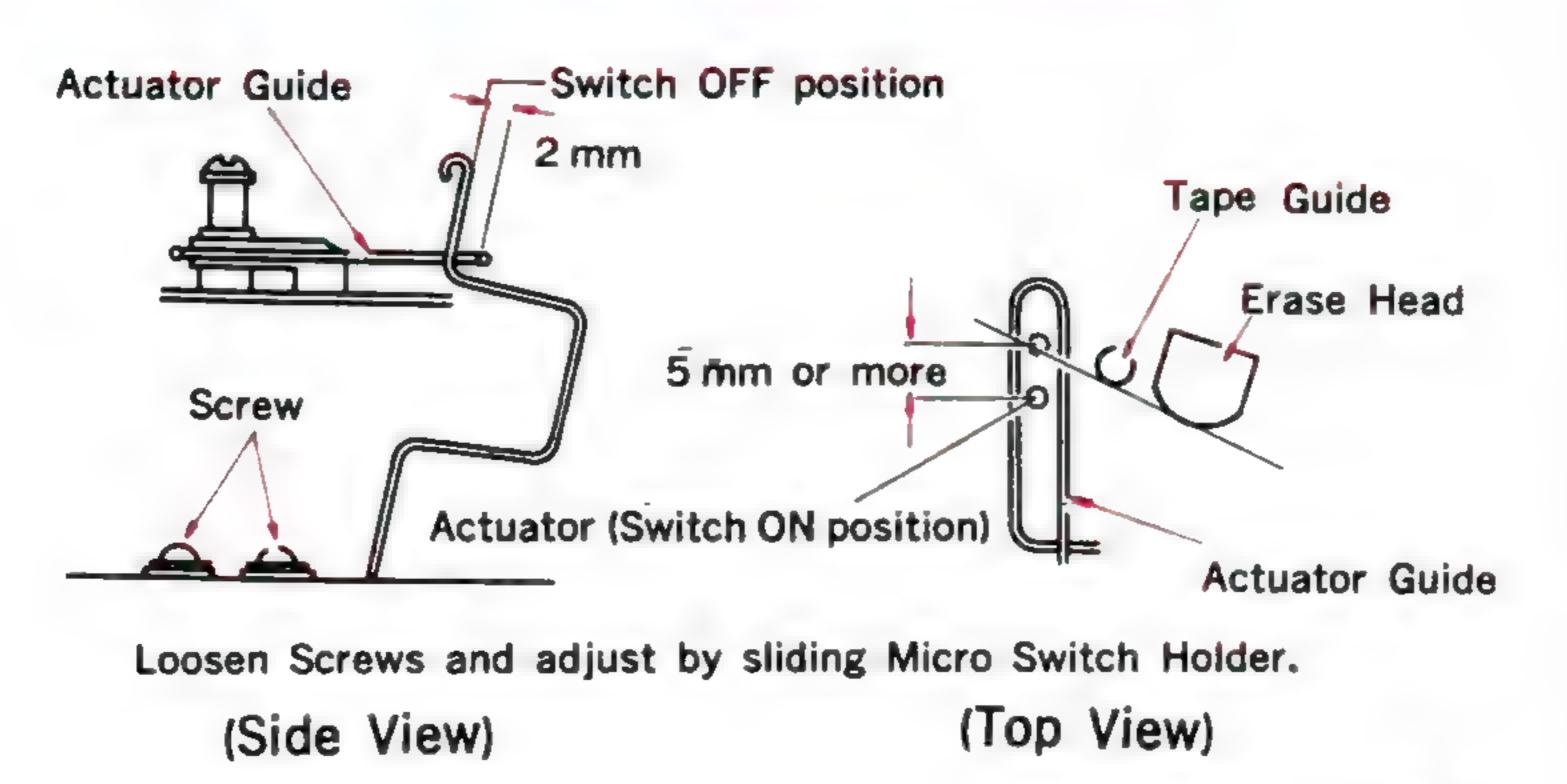


to be adjusted by finger-pushing up or down

(Side View)

(Fig. 32)

# Automatic Shut-OFF Switch Adjustment



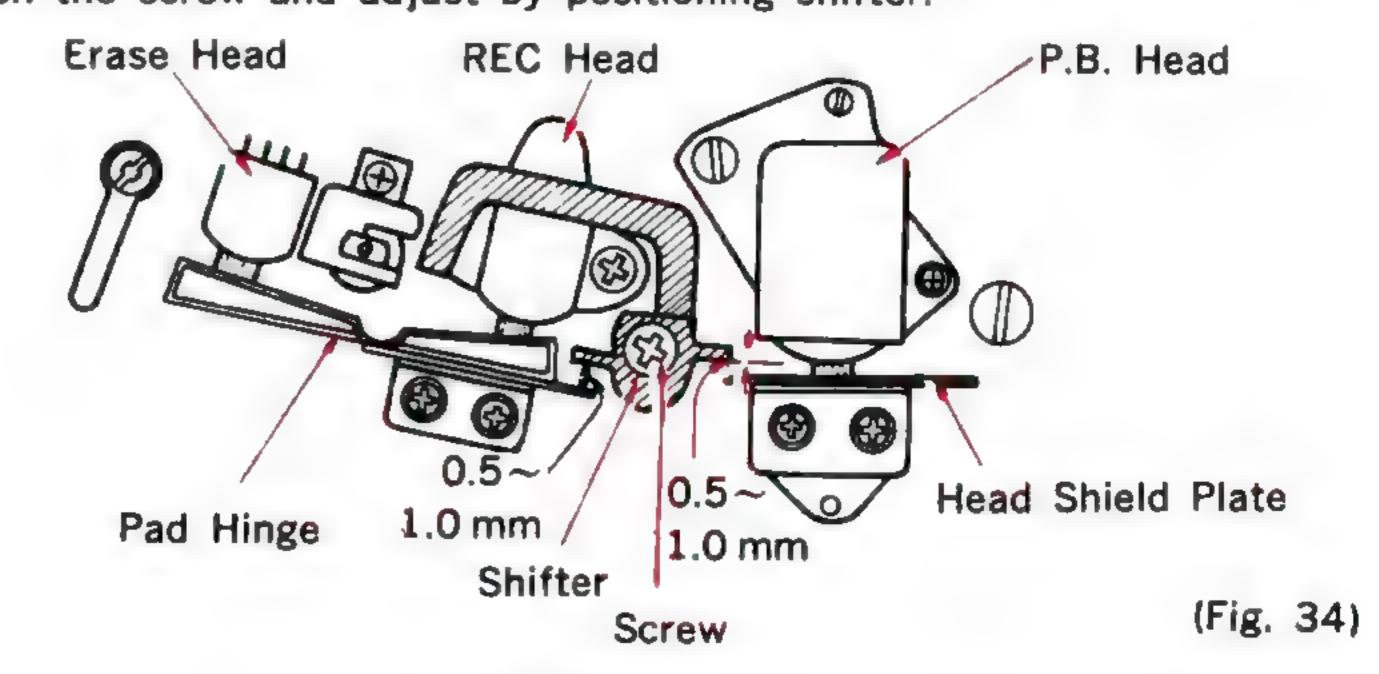
(Fig. 33)

### Shifter Adjustment

#### in FORWARD mode

In forward mode, there should be the clearance of  $0.5 \sim 1.0$  mm as shown. In fast forward mode, tape should not contact with heads.

Make the adjustment with sleeve attached to capstan and without sleeve. Loosen the screw and adjust by positioning shifter.

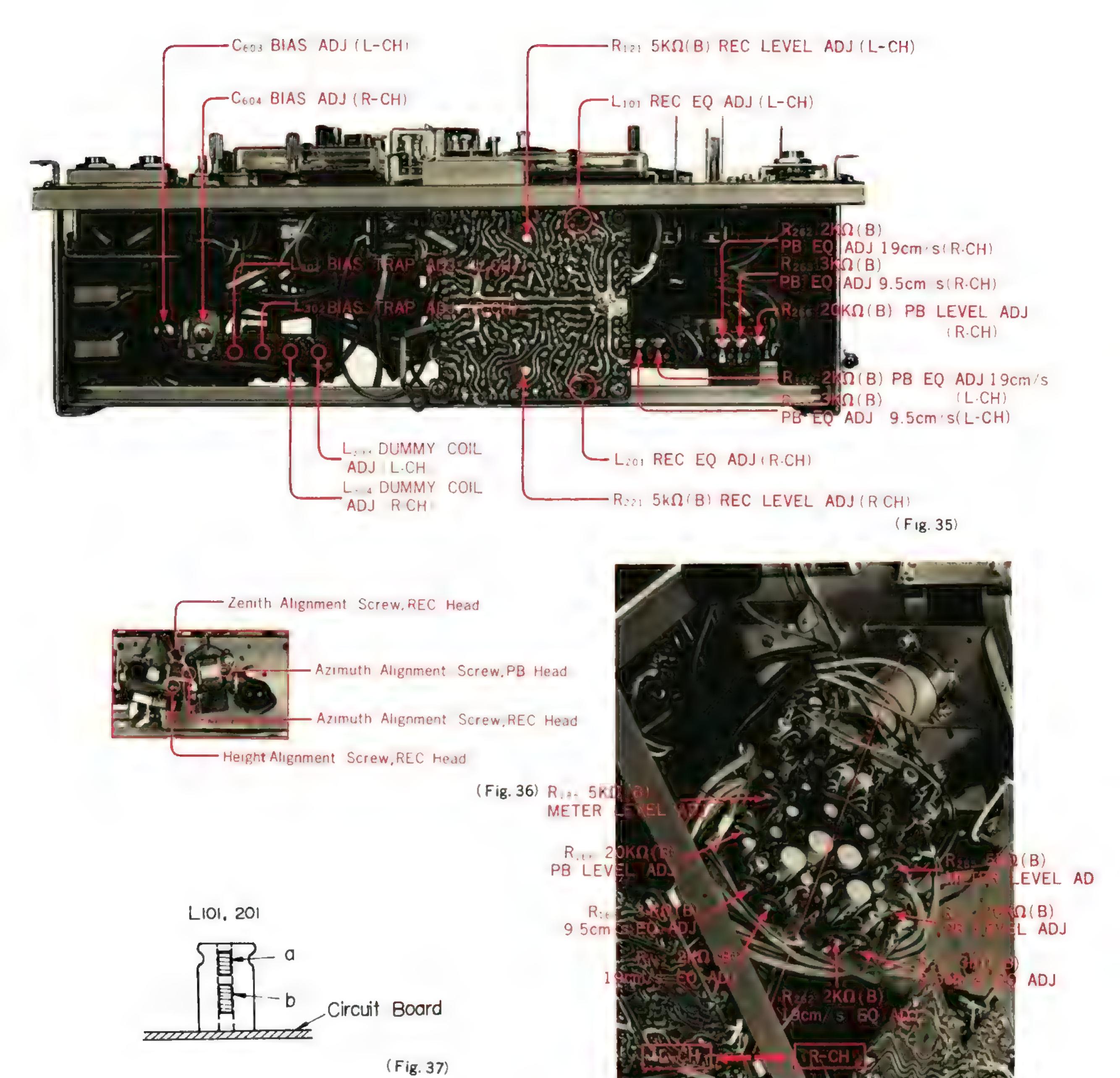


#### Electrical Adjustment

Item	Signal Source	Output Connection	Mode	Adjust	Procedures and Remarks	
1. Playback Head Azimuth Alignment	10 kHz, 3rd section of SONY Align- ment Tape, J-19-F2 Monitor Switch: TAPE	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	PLAYBACK (Stereo)	Playback Head Azimuth Alignment Screw See Fig. 36.	Adjust the screw to obtain maximum reading on VTVM.	
2. Playback Level and Meter Level Adjustments	1 kHz, 1st section of SONY Align- ment Tape, J-19-F2 Monitor Switch: TAPE	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	PLAYBACK (Stereo)	L-CH: R-CH: $R_{266}$ (20 KΩ; B) $R_{185}$ $R_{285}$ (5 KΩ; B) See Fig. 38.	1. Adjust R <sub>166</sub> (L-CH) and R <sub>266</sub> (R-CH) to obtain 0 dBs (0.775 V) on VTVM. 2. Adjust R <sub>185</sub> (L-CH) and R <sub>285</sub> (R-CH) so that pointers of Level Meters stay at 0 VU (100%).	
3. Playback Equalizer Adjustment (1) 7½ ips (19 cm/s)	SONY Alignment Tape, J-19-F2  Monitor Switch: TAPE	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	PLAYBACK (Stereo)	L·CH: R <sub>162</sub> R-CH: R <sub>262</sub> 2 KΩ (B)  See Fig. 35 and Fig. 38.	Deviation against the level at 1 kHz of 3rd section	
(2) 3¾ ips (9.5 cm/s)	SONY Alignment Tape, J-9-F1  Monitor Switch: TAPE	to Lift out sack		L-CH: R <sub>183</sub> R-CH: R <sub>263</sub> 3 KΩ (B)  See Fig. 35 and Fig. 38.	Deviation against the level of 500 Hz of 3rd section           Tape Section         4th         5th         6th         7th           Frequency         5 kHz         2.5 kHz         200 Hz         100 Hz           L-CH         0±2 dB         0±2 dB         + 0.5±2 dB           R-CH         0±2 dB         + 2.5±2 dB         + 1.0±2 dB	
4. Bias Trap Coil Adjustment		VTVM to Test Point and Ground (See Page 31, TP.)	RECORD (Stereo)	L-CH: L <sub>301</sub> R-CH: L <sub>302</sub> 1.8 mH See Fig. 35.	1. Set source volume controls (R <sub>135</sub> & R <sub>235</sub> ) to minimum. 2. Adjust to obtain minimum reading on VTVM.	
5. Record Head Height Adjustment	1 kHz, -60 dBs (0.78 mV) to MIC Jack Input Selector: MIC	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	RECORD (Stereo)	Record Head Height, Zenith and Azimuth Alignment Screws  See Fig. 36.	<ol> <li>Turn three (3) screws (height, zenith and azimuth alignment) so that Record Head will be visually horizontal.</li> <li>Set MONITOR switch to TAPE.</li> <li>Turn Height Alignment Screw to obtain maximum reading on VTVM.         Memorize the number of turns.</li> <li>Turn Zenith Alignment and Azimuth Alignment Screws the same number of turns of height alignment screw.</li> <li>Follow Steps 2 and 3 to obtain maximum reading.</li> </ol>	
6. Record Head Azimuth Alignment	15 kHz, -90 dBs (24.5 \( \mu \text{V} \) to MIC Jack Input Selector: MIC	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	RECORD (Stereo)	Record Head Azimuth Alignment Screw See Fig. 36.	<ol> <li>Set MONITOR switch to TAPE position.</li> <li>Turn Azimuth Alignment Screw to obtain maximum reading on VTVM. Within one turn of the screw, the maximum reading should be obtained. If not, repeat the adjustment as in Item 5.</li> </ol>	
7. Record Bias Adjustment	1 kHz, -60 dBs (0.78 mV) to MIC Jack Input Selector: MIC	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	RECORD (Stereo)	L-CH: C <sub>603</sub> R-CH: C <sub>604</sub> 30~200 pF See Fig. 35.	<ol> <li>Set MONITOR switch to TAPE position.</li> <li>Turn the trimmer capacitors counter-clockwise and set them in minimum capacitance position.</li> <li>Recording the signal, turn the trimmer capacitor (C<sub>603</sub>, L-CH) clockwise slowly until the VTVM reads the maximum value.</li> <li>Continue to turn the capacitor until the VTVM reads a value 0.5 dB below the maximum reading. Read the VTVM reading.</li> <li>Adjust the trimmer capacitor (C<sub>604</sub>, R-CH) in the same way.</li> <li>Make sure that reading of L-CH is the same as one read in Step 4.</li> <li>If not, follow Steps 2~6 again.</li> </ol>	
8. Record Level Adjustment	1 kHz, -60 dBs (0.78 mV) to MIC Jack Input Selector: MIC	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	RECORD (Stereo)	L-CH: R <sub>121</sub> R-CH: R <sub>221</sub> 5 KΩ (B) See Fig. 35.	<ol> <li>Set the MONITOR switches (S<sub>105</sub> &amp; S<sub>205</sub>) to SOURCE position.</li> <li>Feeding the signal, slide the source volume controls (R<sub>135</sub> &amp; R<sub>235</sub>) so that level meters indicate 0 VU (100%).</li> <li>Record the signal on a blank tape.</li> <li>Set the MONITOR switches (S<sub>105</sub> &amp; S<sub>205</sub>) to TAPE position.</li> <li>Adjust R<sub>121</sub> (R<sub>221</sub>) so that VTVM indicates 0 dBs (0.775 V).</li> </ol>	
9. Record Equalizer Adjustment	1 k, 20 kHz, -90 dBs (24.5 µV) to MIC Jack Input Selector: MIC	VTVM and 100kΩ Resistor in parallel to LINE OUT Jack	RECORD (Stereo)	L·CH: L <sub>101</sub> R·CH: L <sub>201</sub> 1.8/1.45 mH See Fig. 35.	<ol> <li>Set the MONITOR switches (S<sub>105</sub> &amp; S<sub>205</sub>) to TAPE position.</li> <li>Record 1 kHz signal of -90 dBs (24.5 μV) on a blank tape and read the VTVM reading.</li> <li>Record 20 kHz signal of -90 dBs (24.5 μV) and adjust L<sub>101</sub> (L<sub>201</sub>) so that VTVM reading is the same as one of 1 kHz signal.</li> <li>Note:Two peaks appear during turning L<sub>101</sub> (L<sub>201</sub>). Take the peak where the core is(b) shown in Fig. 37</li> </ol>	
10. Dummy Coil Adjustment		VTVM to Test Point (See Page 31, TP.)	RECORD (Stereo)	L-CH: L <sub>303</sub> R-CH: L <sub>304</sub> 1 mH See Fig. 35.	<ol> <li>Set source volume controls (R<sub>135</sub> &amp; R<sub>235</sub>) to minimum.</li> <li>Read the VTVM readings of both channels.</li> <li>Set the machine in L-CH RECORD mode.</li> <li>Adjust L<sub>303</sub> so that VTVM reading is the same as one read in Step 2.</li> <li>Set the machine in R-CH RECORD mode and adjust L<sub>304</sub> in the same way.</li> </ol>	

#### NOTE:

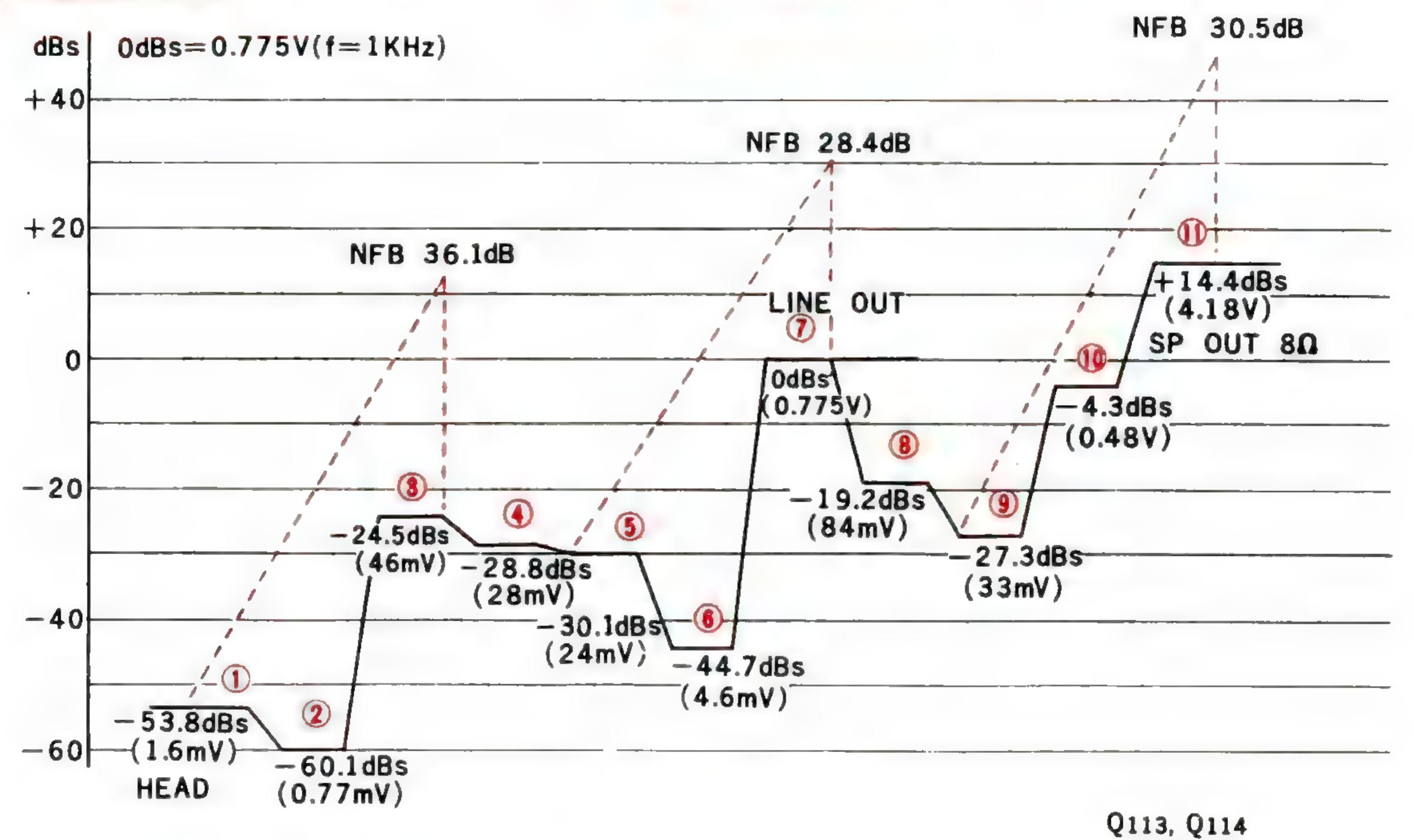
- 1) Before adjustments, clean and demagnetize the Record Head, the Playback Head and the Erase Head.
- 2) The Sound-on-Sound (SOS) Switch and the Noise Suppressor Switch should be set in OFF position.
- 3) The adjustments should be made in numerical order.
- 4) After adjustments, apply Lock Paint to the adjusted points.

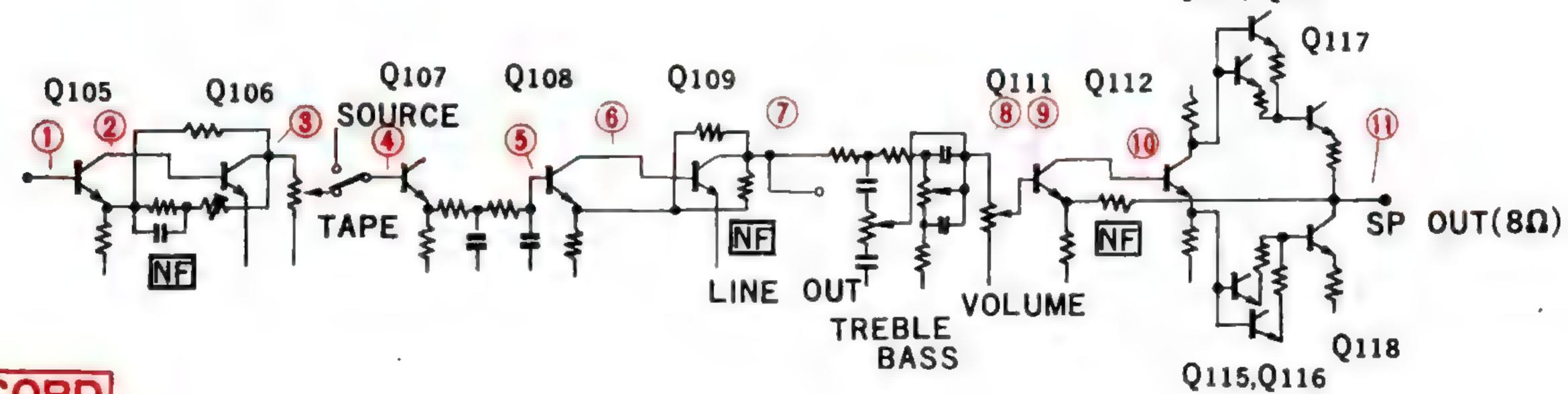


(Fig. 38)

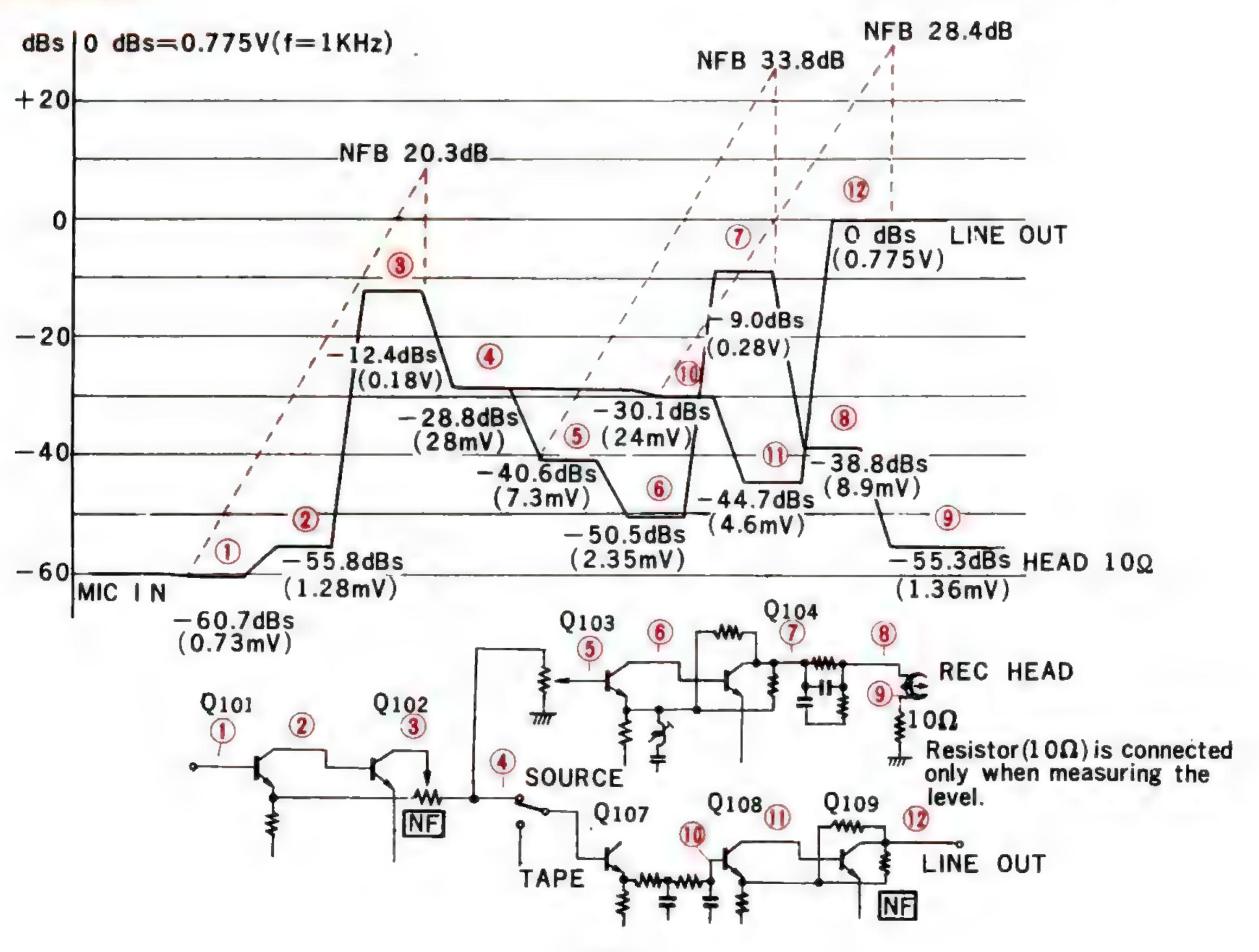
#### Level Diagram

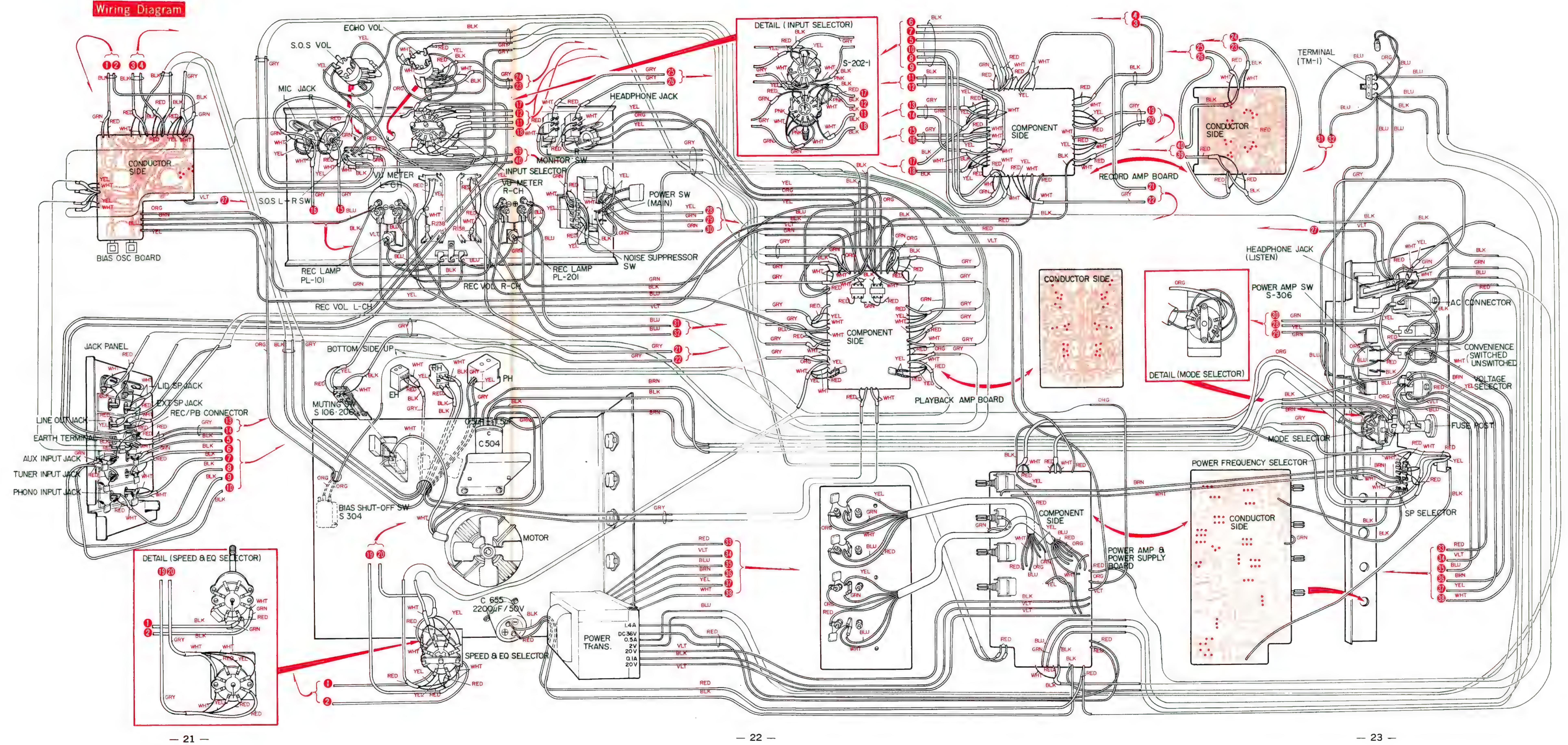
# PLAYBACK




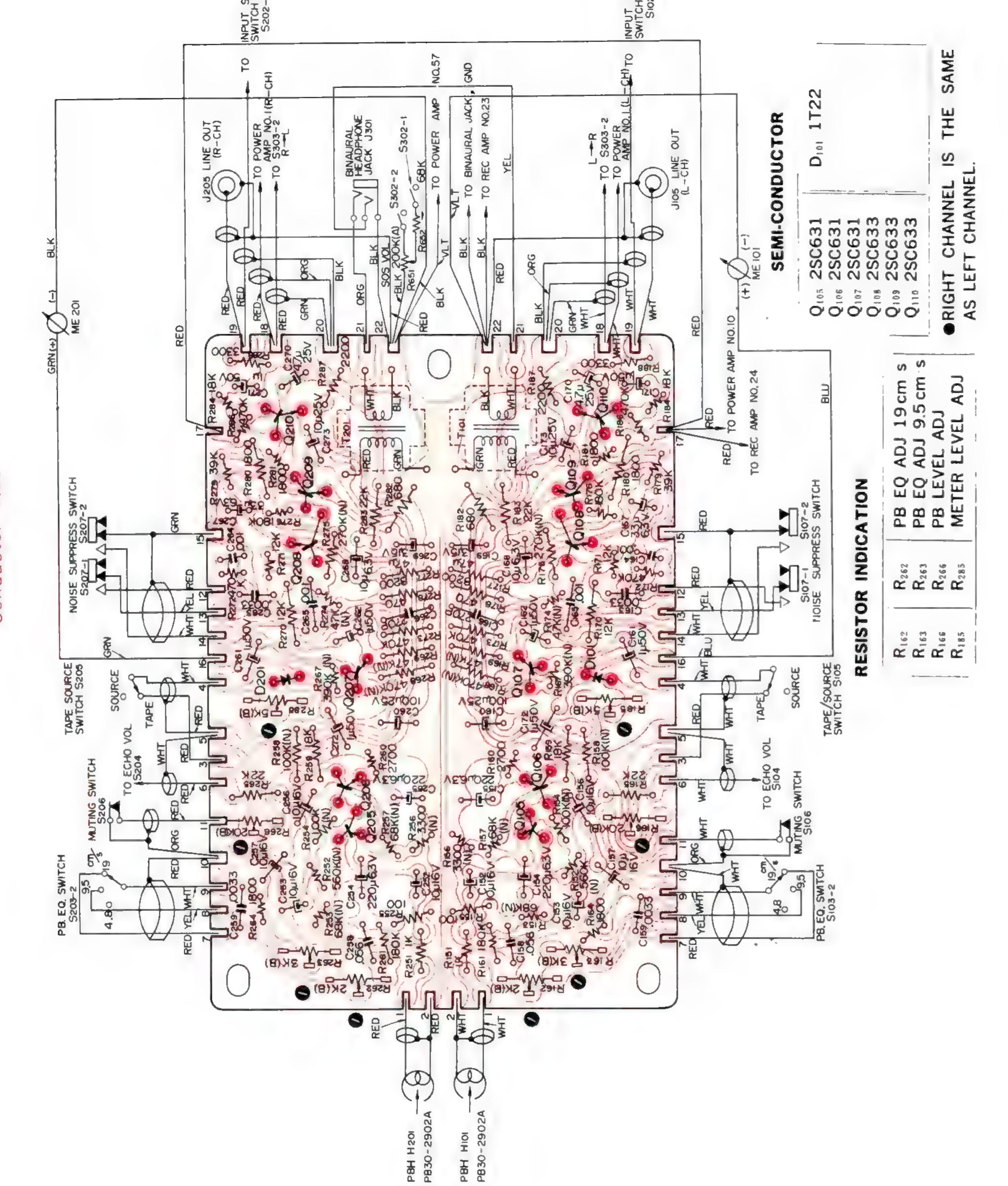


# RECORD



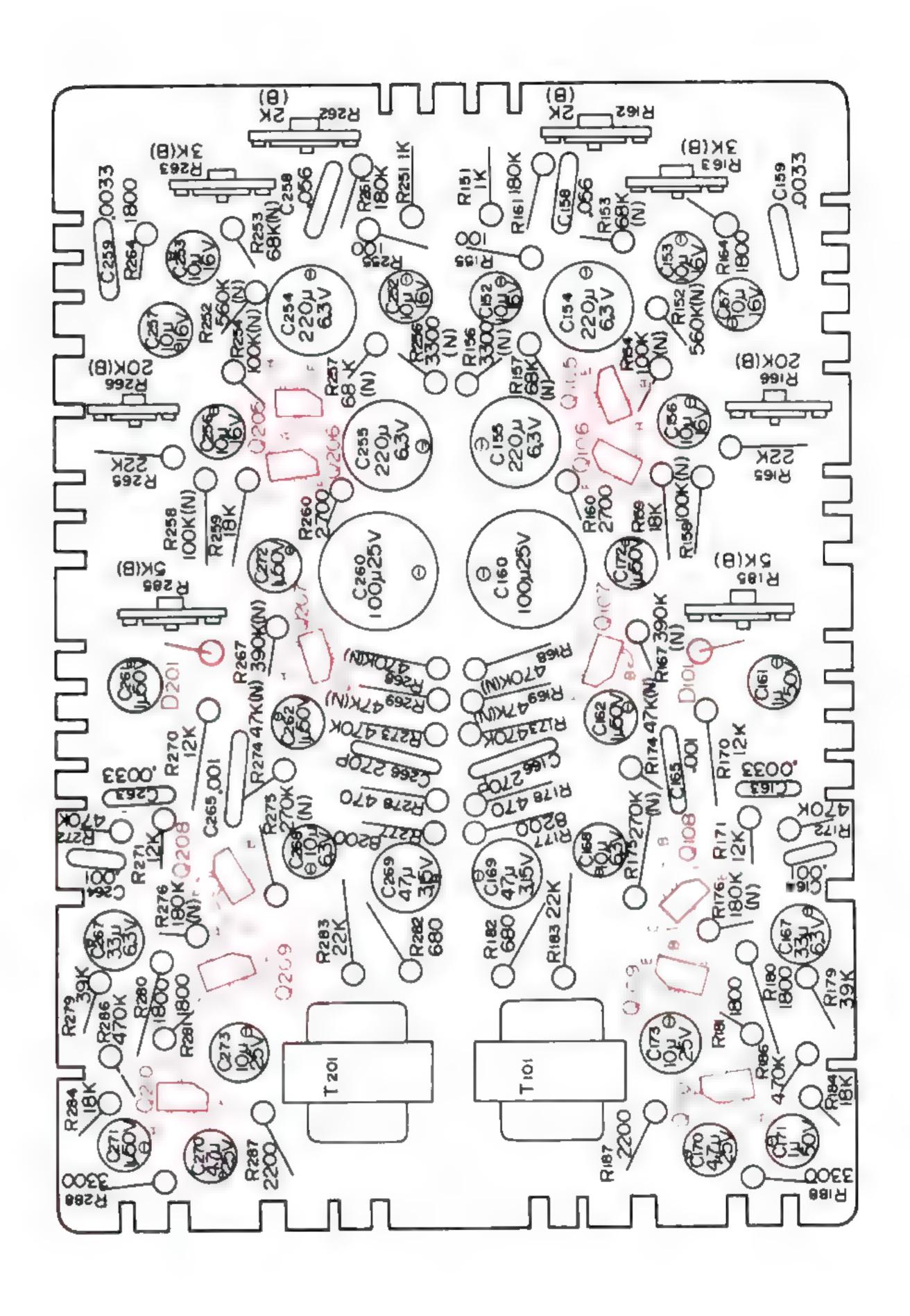


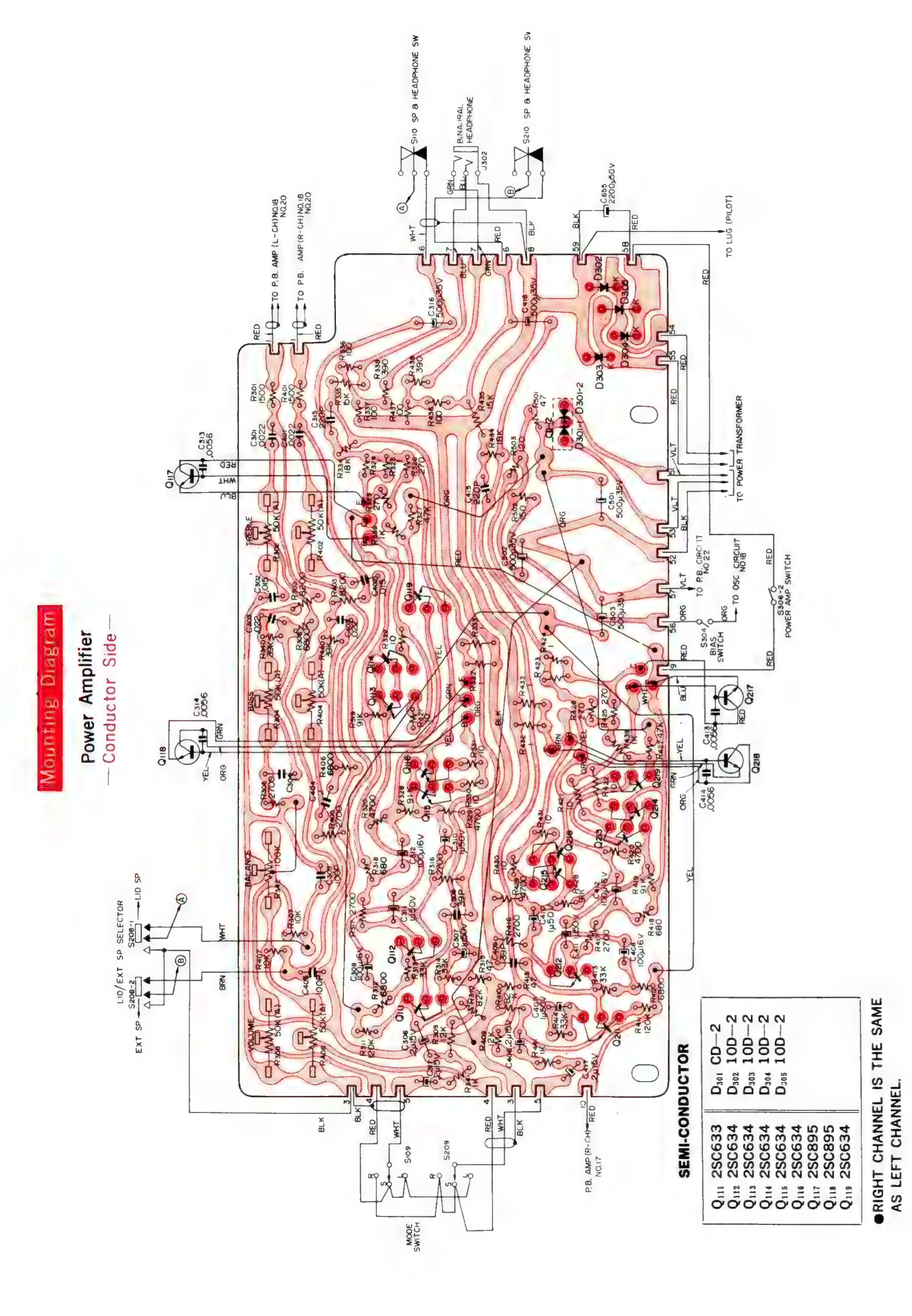




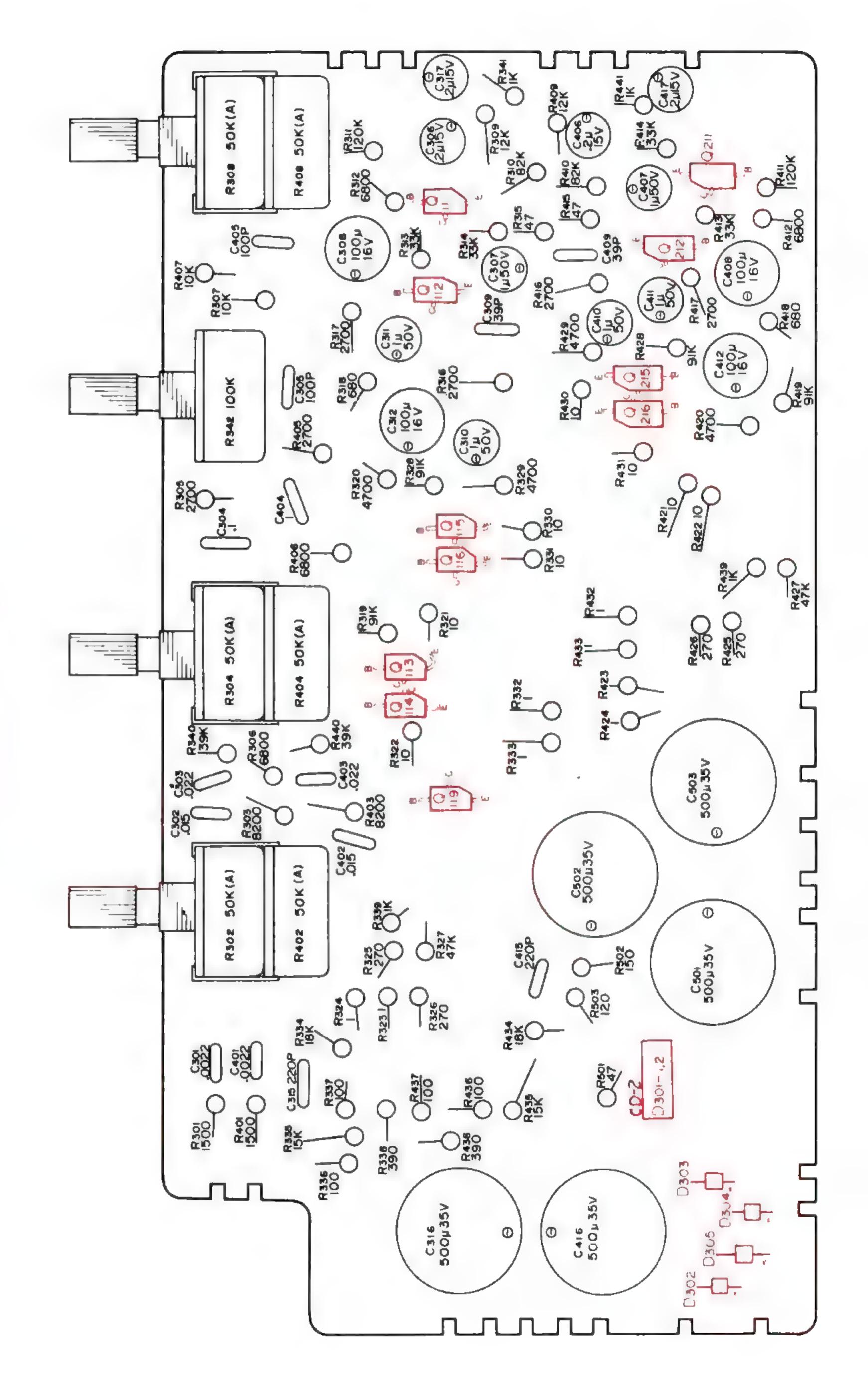
Playback Amplifier

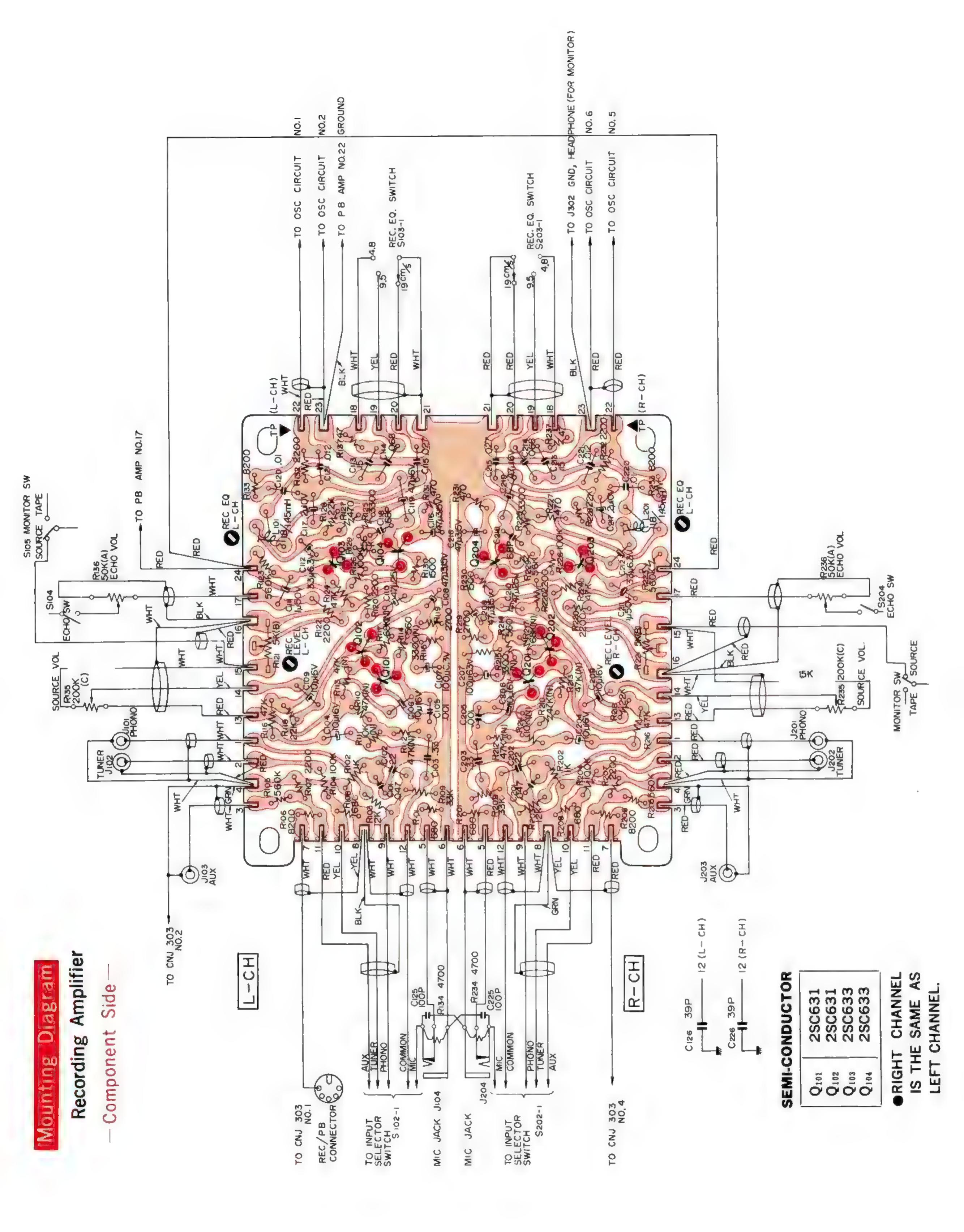
Component Side

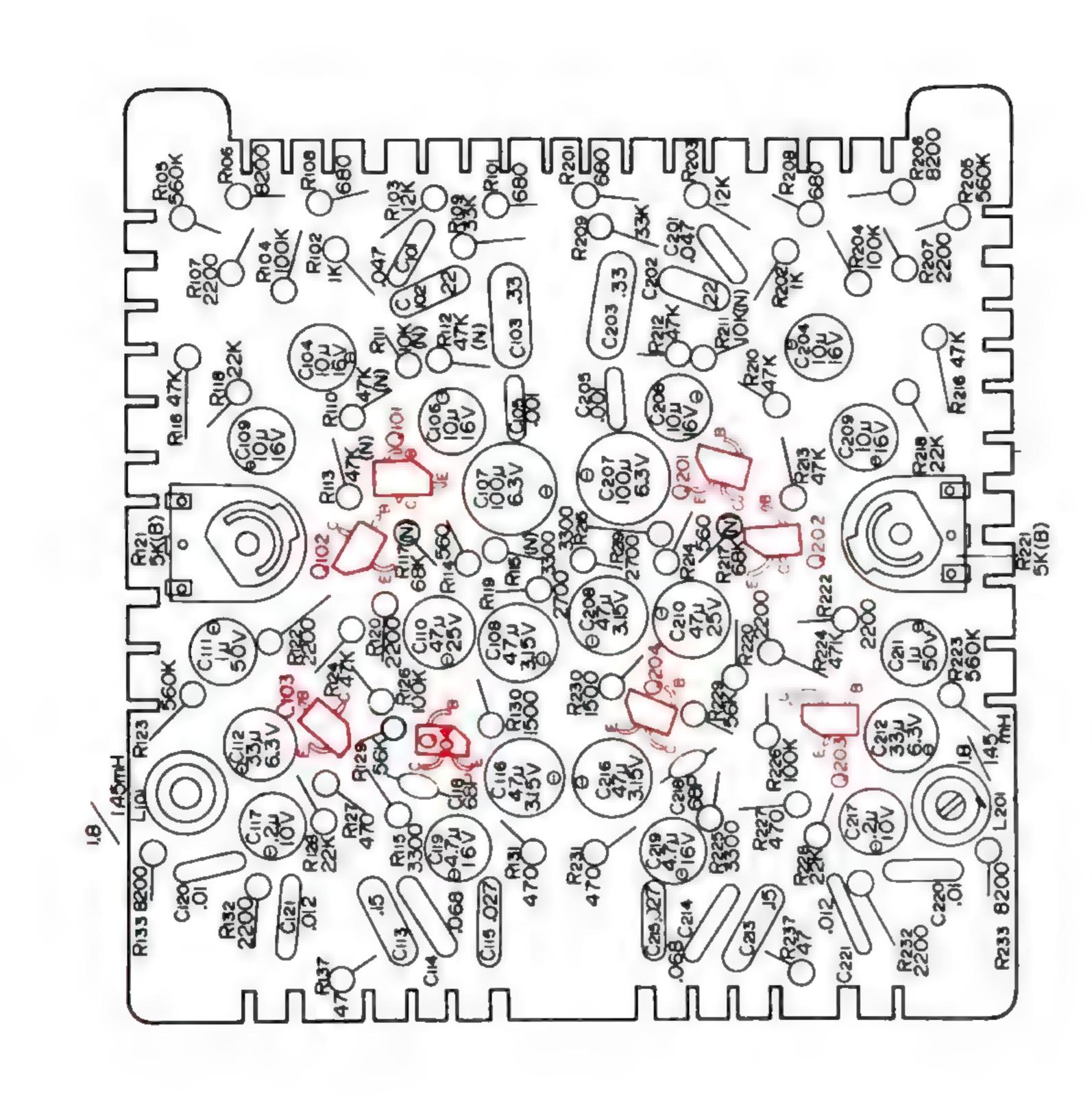




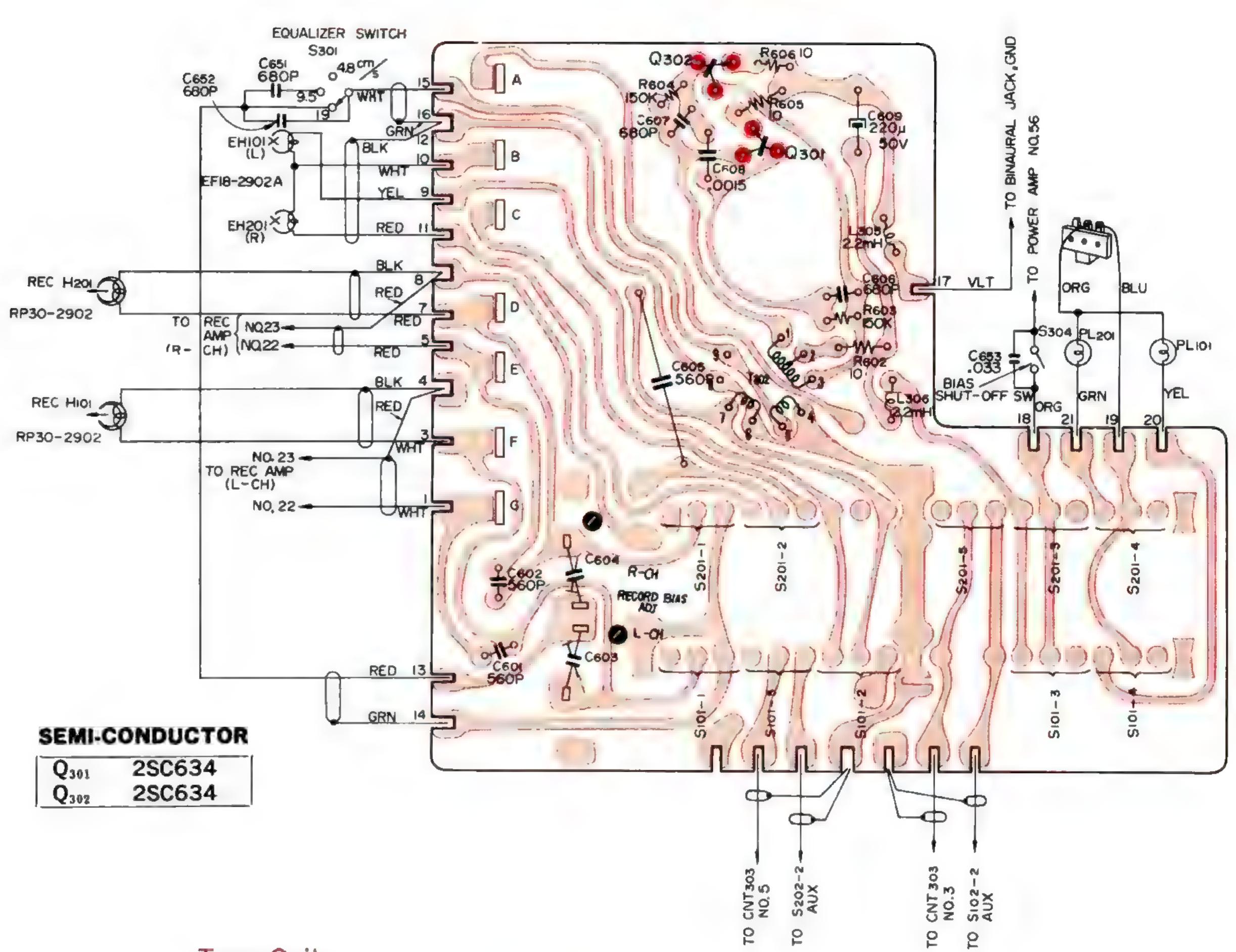
Mounting Diagram
Power Amplifier
Component Side



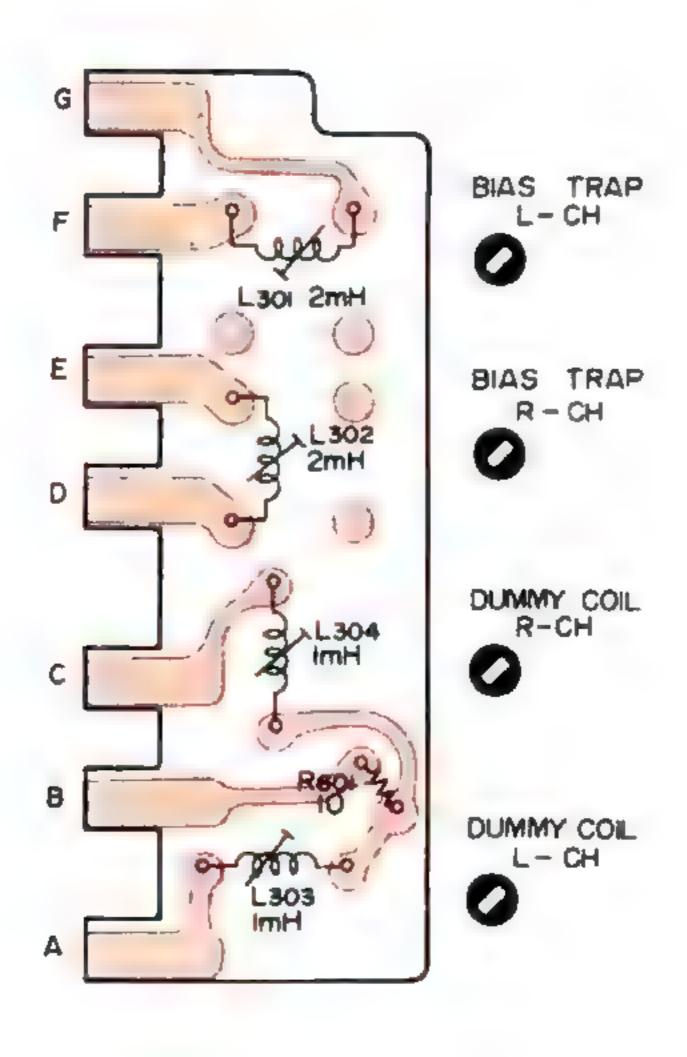




#### Bias Oscillator



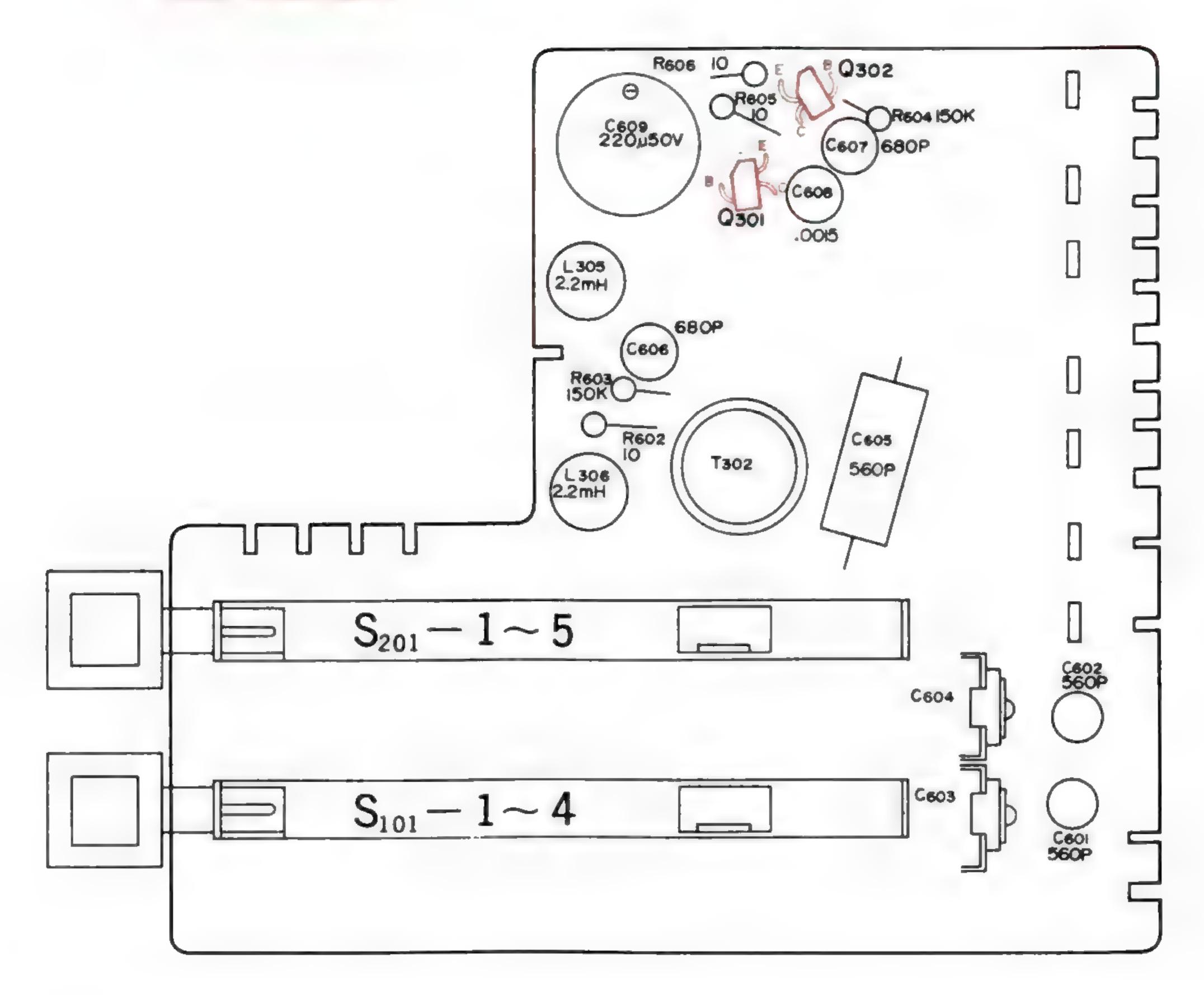
Trap Coil



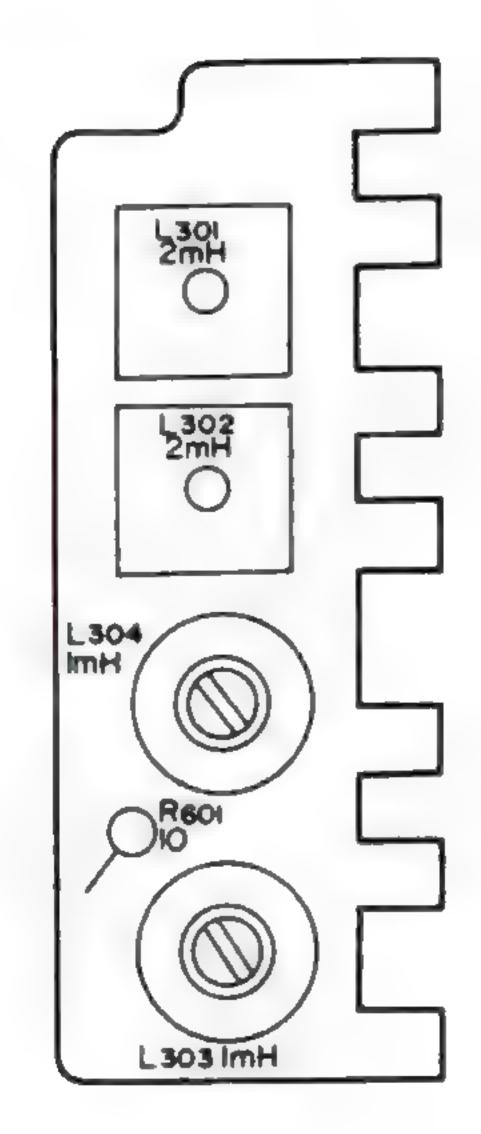


# - Component Side -

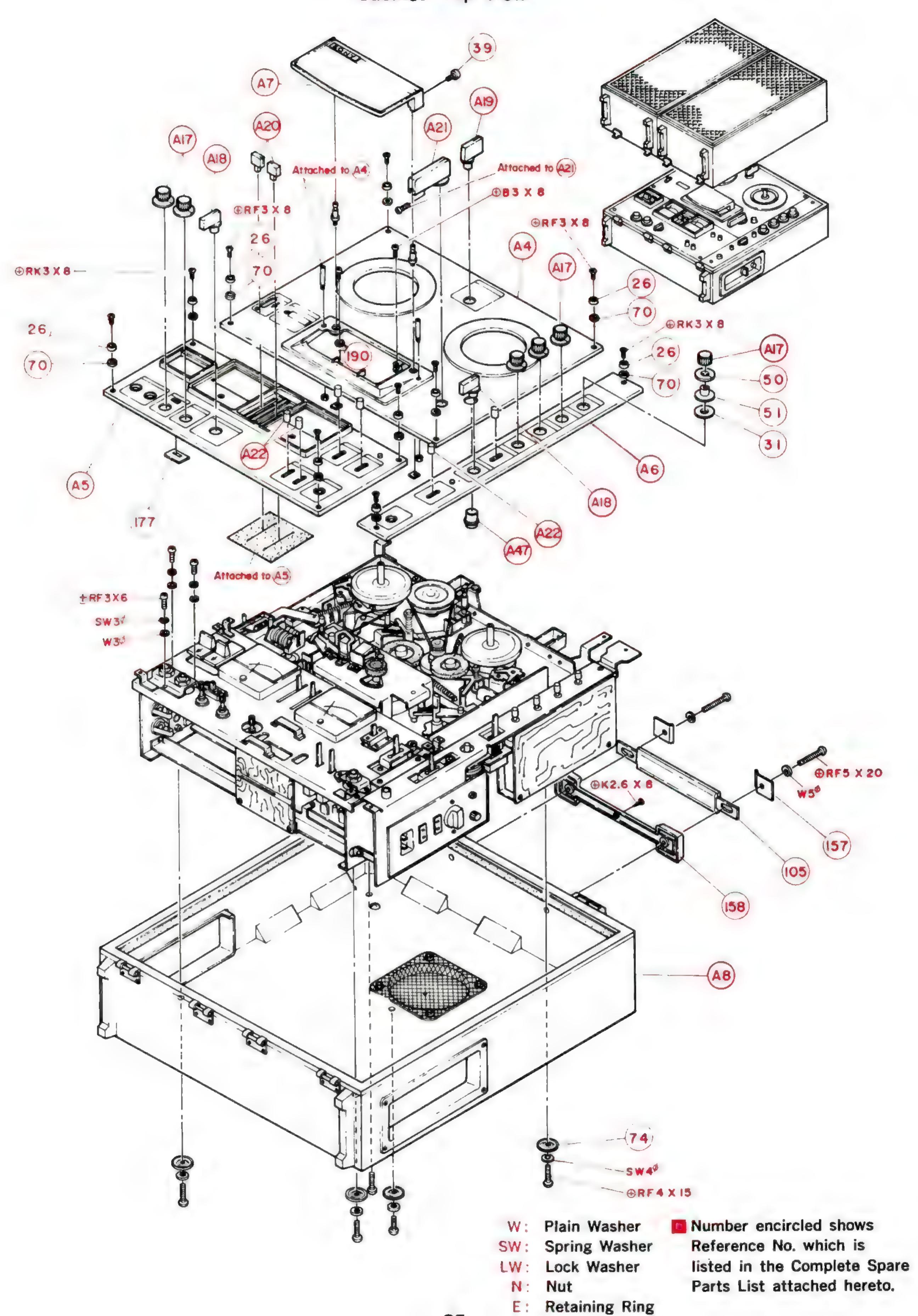
#### Bias Oscillator



Trap Coil

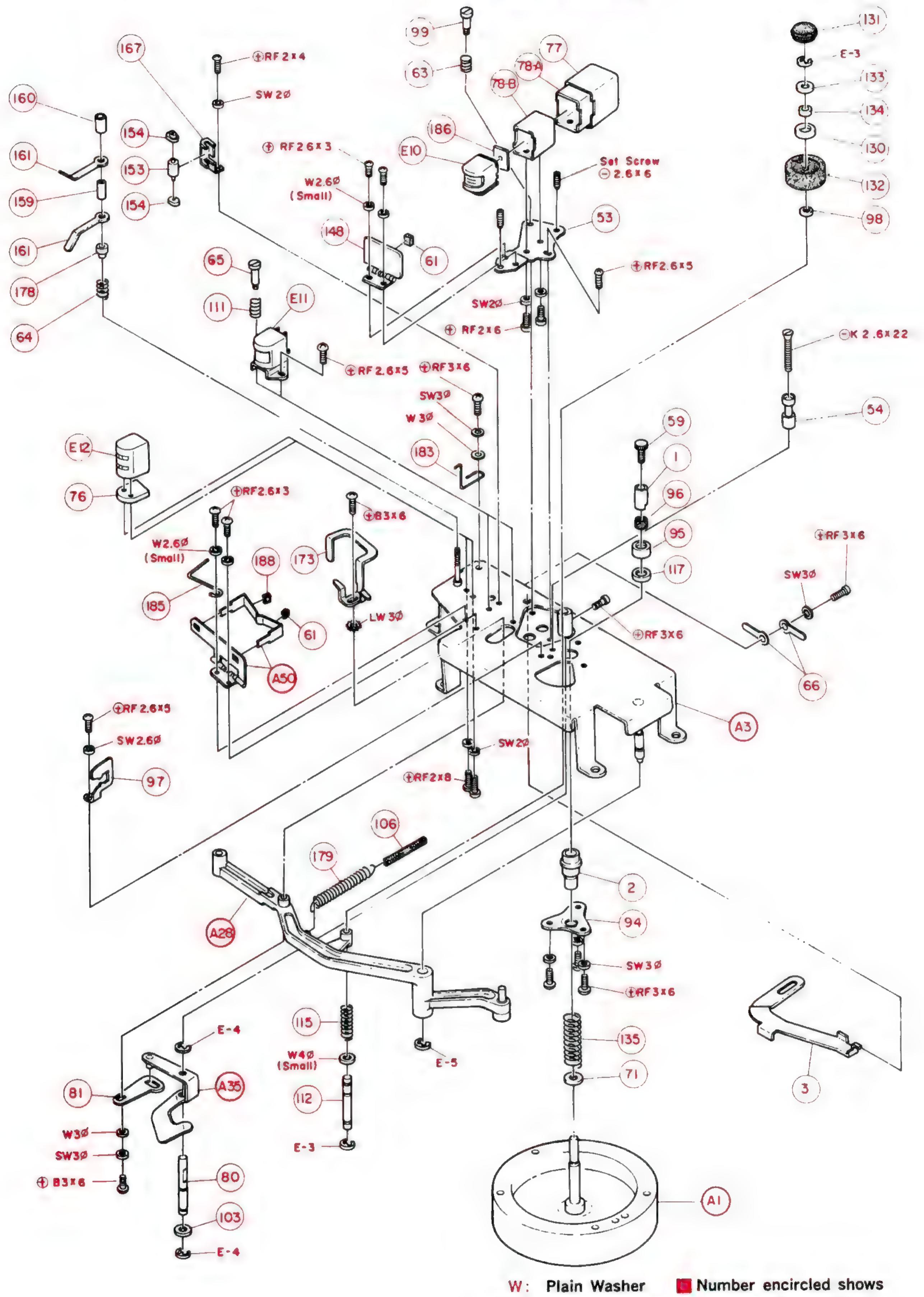


#### Cabinet Top View



**-- 35 --**

#### Head Deck Top View



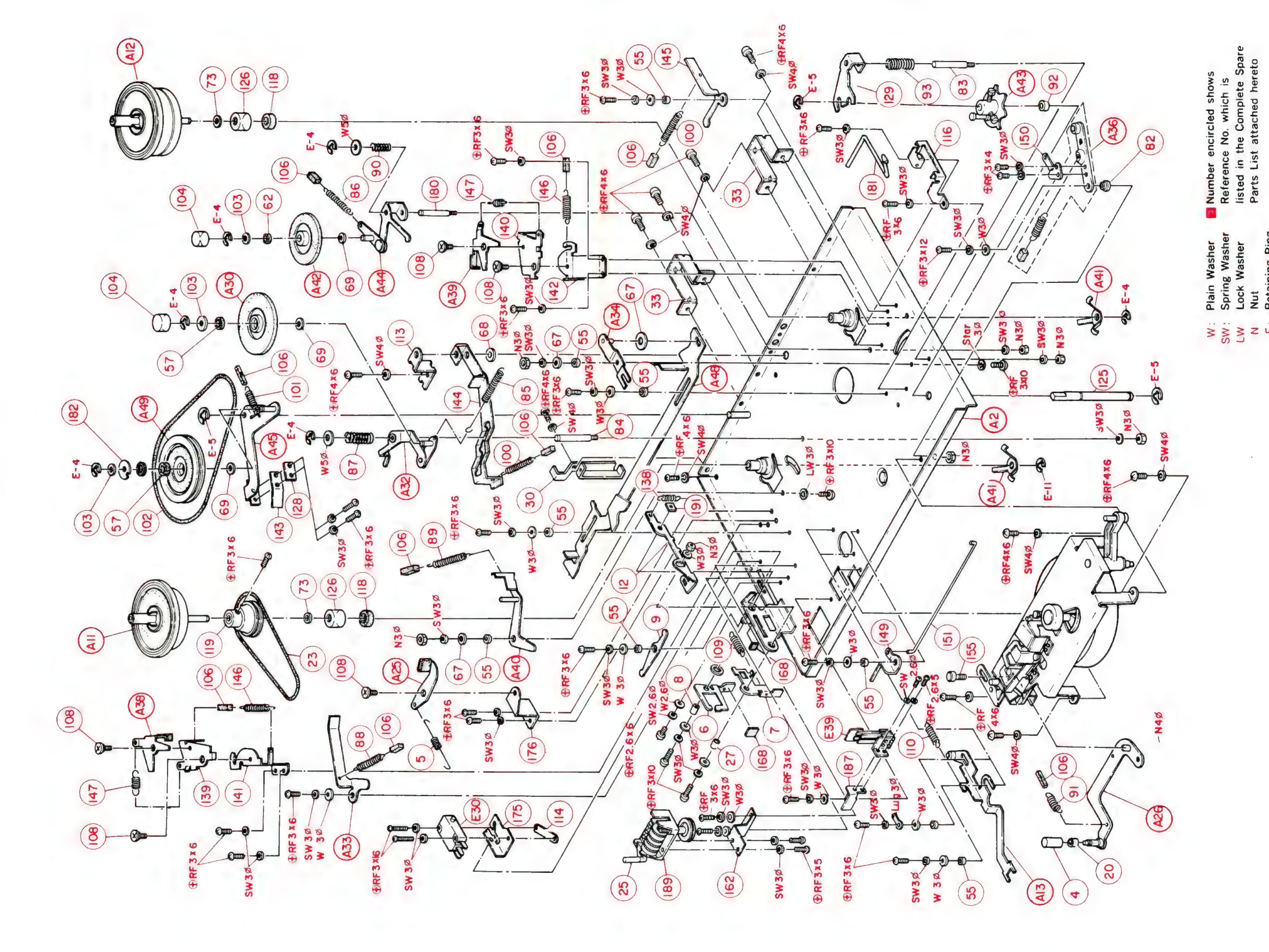
LW: Lock Washer

- 36 - N: Nut

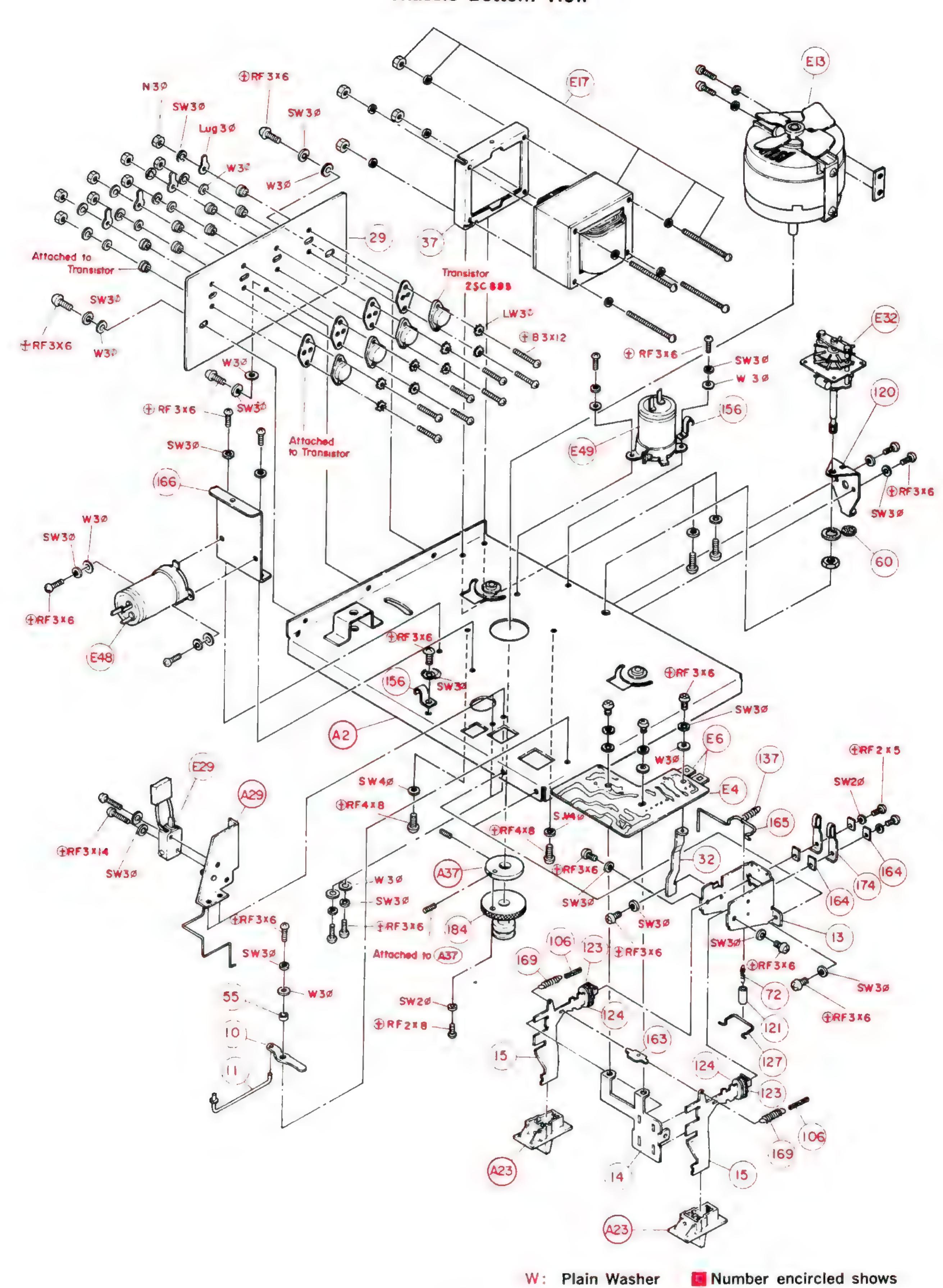
E: Retaining Ring

Spring Washer

Number encircled shows
Reference No. which is
listed in the Complete Spare
Parts List attached hereto.



#### Chassis Bottom View



SW: Spring Washer

E: Retaining Ring

LW: Lock Washer

N: Nut

Reference No. which is

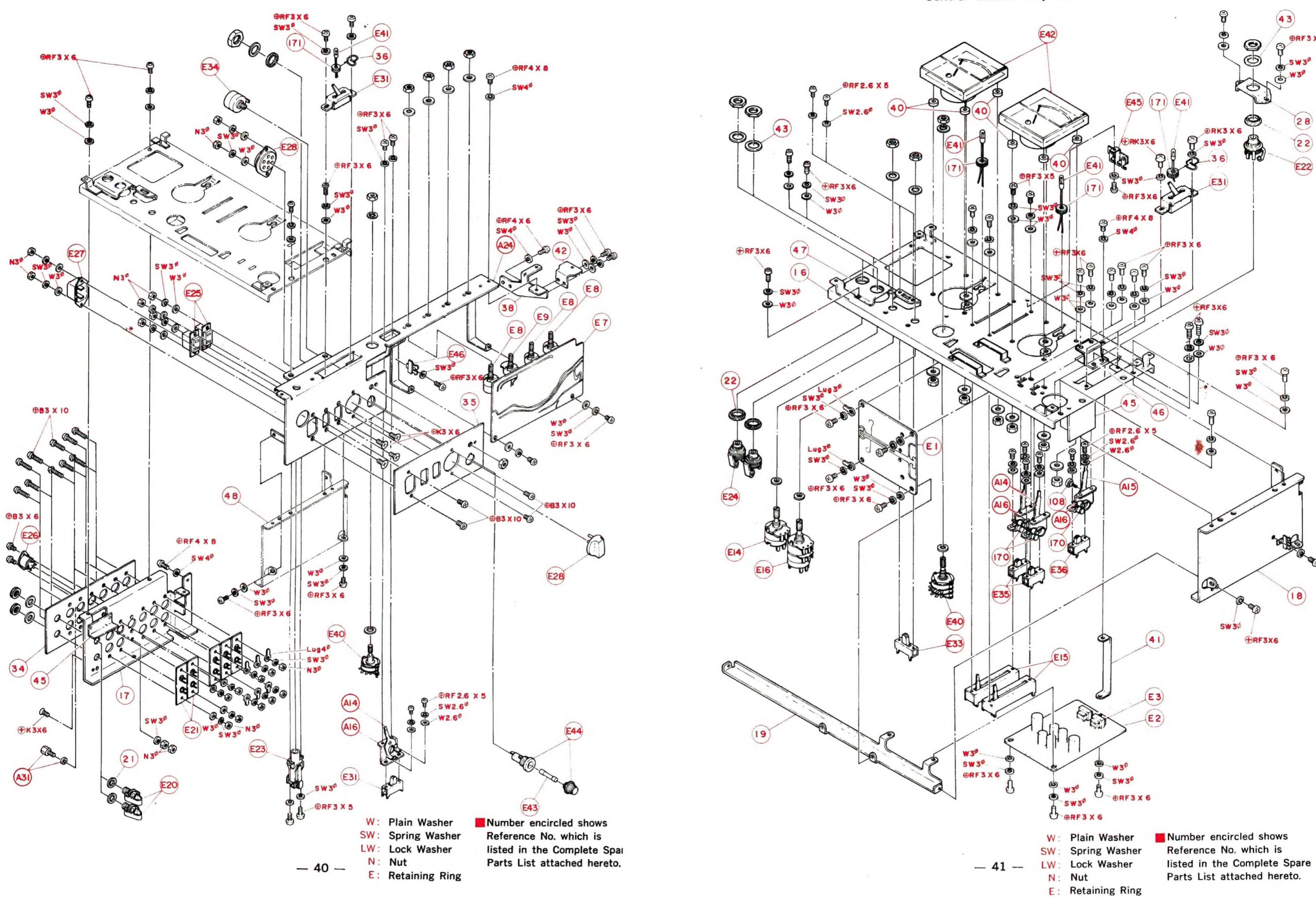
listed in the Complete Spare

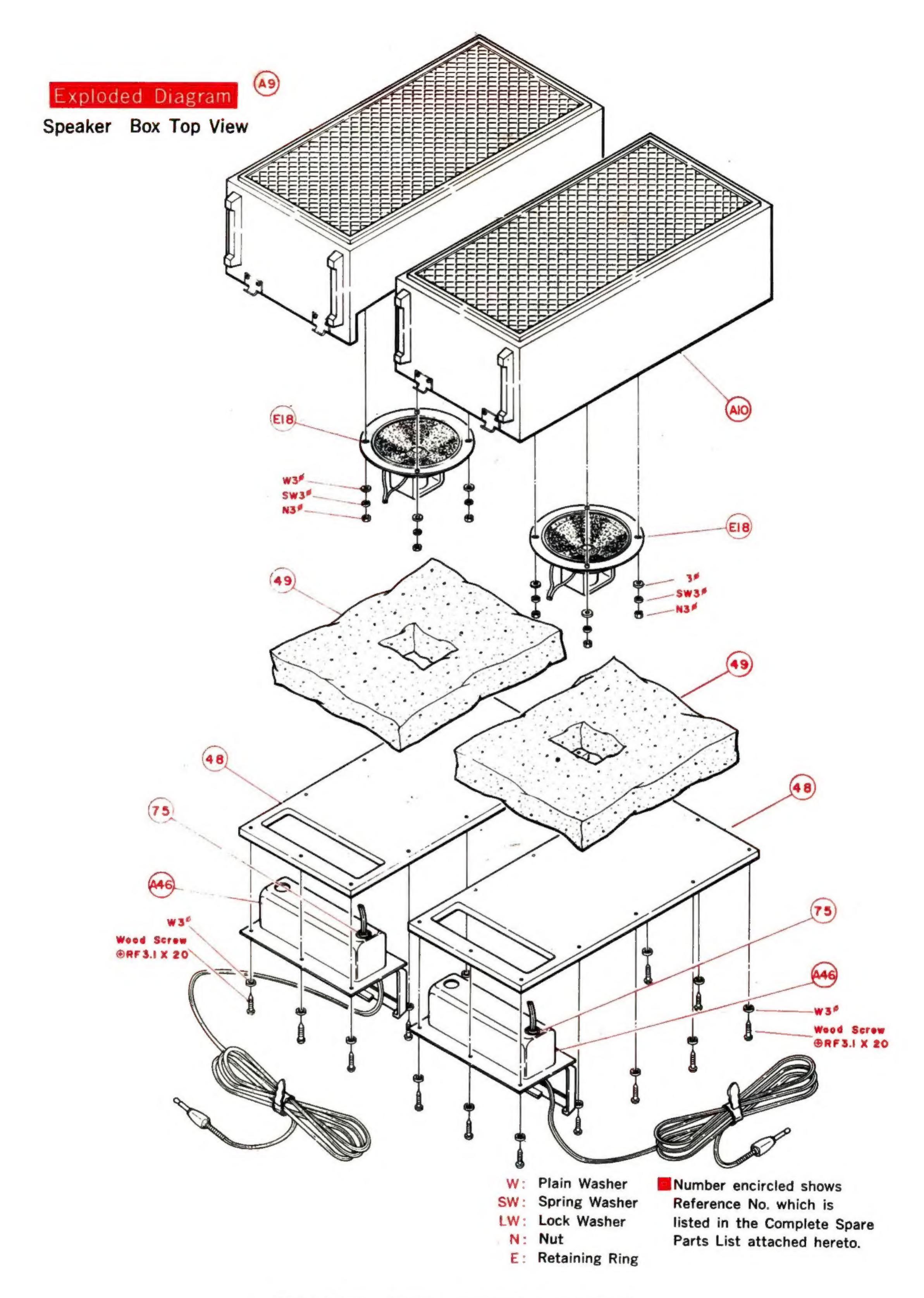
Parts List attached hereto.

Amp. Chassis Top View

#### Exploded Diagram


Control Chassis Top View





#### SONY CORPORATION

# SONY® TC-630 SCHEMATIC DIAGRAM/SCAHLTPLAN/DIAGRAMME SCHEMATIQUE



Transi	stors				
Symbol		Description			
Q <sub>101</sub>	Q <sub>201</sub>	2SC631	Q <sub>112</sub>	Q212	2SC634
Q <sub>102</sub>	Q202	2SC631	Q113	Q213	2SC634
Q <sub>103</sub>	Q <sub>203</sub>	2SC633	Q114	Q214	2SC634
Q104	Q204	2SC633	Q115	Q215	2SC634
Q105	Q205	2SC631	Q116	Q216	2SC634
Q106	Q206	2SC631	Q117	Q217	2SC895
Q107	Q207	2SC631	Q118	Q218	2SC895
Q10a	Q208	2SC633	Q119	Q219	2SC634
Q109	Q209	2SC633	$Q_{301}$		2SC634
Q110	Q210	2SC633	Q302		2SC634
Q111	Q <sub>211</sub>	2SC633			

Zeichen		Beschreibung			
Q101	Q201	2SC631	Q112	Q <sub>212</sub>	2SC634
Q102	Q202	2SC631	Q113	Q <sub>213</sub>	2SC634
Q103	Q203	2SC633	Q <sub>114</sub>	Q <sub>214</sub>	2SC634
Q104	Q204	2SC633	Q115	Q <sub>215</sub>	2SC634
Q105	Q205	2SC631	Q116	Q216	2SC634
Q106	Q206	2SC631	Q117	Q217	2SC895
Q107	Q207	2SC631	Q118	Q <sub>218</sub>	2SC895
Q108	Q <sub>208</sub>	2SC633	Q119	Q219	2SC634
Q109	Q209	2SC633	Q <sub>301</sub>		2SC634
Q110	Q210	2SC633	Q302		2SC634
Q111	Q <sub>211</sub>	2SC633			

Symbol		Description			
Q <sub>101</sub>	Q201	2SC631	Q112	Q <sub>212</sub>	2SC634
Q102	Q202	2SC631	Q113	Q213	2SC634
Q103	Q203	2SC633	Q114	Q214	2SC634
Q104	Q204	2SC633	Q115	Q215	2SC634
Q105	Q205	2SC631	Q116	Q216	2SC634
Q106	Q206	2SC631	Q117	Q <sub>217</sub>	2SC895
Q107	Q207	2SC631	Q <sub>118</sub>	Q218	2SC895
Q108	Q208	2SC633	Q119	Q219	2SC634
Q109	Q209	2SC633	Q301		2SC634
Q110	Q210	2SC633	Q302		2SC634
Q111	Q <sub>211</sub>	2SC633			

Switches	
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Switch No.	Description	Position
S101-15. S201-05	Record/Playback switch	Playback
S <sub>102-1,-2</sub> , S <sub>202-1,-2</sub>	Input selector	MIC
S <sub>103-1</sub> , -2, S <sub>203-1</sub> , -2 S <sub>301</sub>	Speed and equalize switch	7½ ips
S104. S204	Echo switch	Off
S <sub>105-1</sub> , -2, S <sub>205-1</sub> , -2	Monitor selector	TAPE
S106. S206	Muting switch	Off
S <sub>107-1</sub> , -2, S <sub>207-1</sub> , -2	Noise suppressor	Off
S <sub>108-1</sub> , -2 S <sub>208-1</sub> , -2	Speaker selector	Lid Speaker
S109. S209	Mode selector	Stereo
S110. S210	Speaker and headphone switch	Speaker
S <sub>302-1</sub> , -2	Sound-on-sound control	Off
S <sub>303-1</sub> , -2	Sound-on-sound selector	L→R
S <sub>304</sub>	Bias shut-off switch	Off
S <sub>305-1</sub> , -2	Main power switch	Off
S <sub>306-1</sub> , -2	Power-amp power switch	Off
S <sub>307</sub>	Automatic shut-off switch	Off
S <sub>308</sub>	Frequency selector	50 HzOn 60 HzOff

## Schalter

Transistoren

Schalter Nr.	Beschreibung	Stellung
S101-15. S201-15	Aufnahme-Wiedergabe-Schalter	Wiedergabe
S <sub>102-1</sub> , -2. S <sub>202-1</sub> , -2	Eingangswähler	MIC
S <sub>103-1</sub> , -2, S <sub>203-1</sub> , -2 S <sub>301</sub>	Geschwindigkeits- und Aus- gleichsschalter	19 cm/sec
S <sub>104</sub> . S <sub>204</sub>	Echoschalter	Aus
S <sub>105-1</sub> , -2, S <sub>205-1</sub> , -2	Mithörwähler	TAPE
S <sub>106</sub> . S <sub>206</sub>	Rauschabschaltungsschalter	Aus
S <sub>107-1</sub> , -2 · S <sub>207-1</sub> , -2	Rauschunterdrückung	Aus
S <sub>108-1</sub> , -2, S <sub>208-1</sub> , -2	Lautsprecherwähler	Deckellaut- sprecher
S <sub>109</sub> . S <sub>209</sub>	Kanalwähler	Stereo
S <sub>110</sub> . S <sub>210</sub>	Lautsprecher- und Kopfhörer schalter	Lautsprecher
S <sub>302-1</sub> , -2	Multiplay-Regler	Aus
S <sub>303-1</sub> , -2	Multiplay-Wähler	L→R
S <sub>304</sub>	Ausschalter für Vormagneti- sierung	Aus
S <sub>305-1</sub> , -2	Stromschalter	Aus
S <sub>306-1</sub> , -2	Stromschalter für Ausgangsver- sätrker	Aus
S <sub>307</sub>	Automatischer Bandstopschalter	Aus
S <sub>308</sub>	Frequenzwähler	50 HzEin 60 HzAus

#### Commutateurs

**Transistors** 

N. de Commutateur	Decembelon	Desidies
iv. de Commutateur	Description	Position
S <sub>101-15</sub> , S <sub>201-15</sub>	Commutateur d'enregistre- ment/écoute	Ecoute
S <sub>102-1</sub> , -2. S <sub>202-1</sub> , -2	Sélecteur d'entrée	MIC
S <sub>103-1</sub> , -2, S <sub>203-1</sub> , -2 S <sub>301</sub>	Commutateur de vitesse et d'égalisation	19 cm/sec
S <sub>104</sub> . S <sub>204</sub>	Commutateur d'écho	Arrêt
S <sub>105-1</sub> , -2 S <sub>205-1</sub> -2	Sélecteur de relais	Bande
S <sub>106</sub> . S <sub>206</sub>	Commutateur d'assourdisse- ment	Arrêt
S <sub>107-1</sub> , -2, S <sub>207-1</sub> , -2	Suppresseur de bruit	Arrêt
S <sub>108-1</sub> , -2, S <sub>208-1</sub> , -2	Sélecteur de haut-parleur	Haut-parleur f mant couvercle
S <sub>109</sub> . S <sub>209</sub>	Sélecteur de mode	Stéréo
S <sub>110</sub> , S <sub>210</sub>	Commutateur de haut-parleur et de casque d'écoute	Haut-parleur
S <sub>302-1</sub> , -2	Réglage de son-sur-son	Arrêt
S <sub>303-1</sub> , -2	Sélecteur de son-sur-son	$L \rightarrow R$
S <sub>304</sub>	Commutateur d'arrêt de bias	Arrêt
S <sub>305-1</sub> , -2	Commutateur d'alimentation principal	Arrêt
S <sub>306-1</sub> , -2	Commutateur d'alimentation d'amplification de puissance	Arrêt
S <sub>307</sub>	Commutateur d'arrêt automa- tique	Arrêt
308	Sélecteur de fréquence	50 HzMarche